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The Journal of The Medical Association of Georgia

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Volume XX

January-December, 1931

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The Nurse's Lexicon. For the Use of Graduate and Student Nurses, of Premedical and Dental Students, and of the General Public. By Thomas Lathrop Stedman, M.D., Editor of the "Twentieth Century Practice of Medicine", of the "Reference Book of the Medical Sciences," and of "A Practical Medical Dictionary"; Formerly Editor of the "Medical Record". Contains 629 pages. Publishers: William Wood and Company, 156 Fifth Avenue, New York City. Price \$2.00.

Orthopedic Surgery by Sir Robert Jones, Bart., K. B. E., C. B. Ch. M., Emeritus President, British Orthopedic Association; Past President of Association of Surgeons of Great Britain and Ireland; Consulting Surgeon of Shropshire Orthopedic Hospital; Director of Orthopedic Surgery of St. Thomas' Hospital, London, Royal Liverpool Children's Hospital, and Royal Infirmary Hospital, Liverpool. And Robert W. Lovett, M.D., Late John B. and Buckminster Brown Professor of Orthopedic Surgery in Harvard University, Member of the International Surgical Society; Member of the British, Italian, French and American Orthopedic Associations, and Member of the Swedish Society of Physicians. Second Edition Revised. Publishers: William Wood and Company, 156 Fifth Avenue, New York City. Price \$11.00.

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WEE MODERNS
BY BERTON BRALEY

The babies of these present days are raised upon
a system,
You count their calories of food and on a card
you list 'em;
They're spanked upon a schedule and petted by
the clock
And you mustn't ever jounce 'em and you
mustn't erer rock;
Physicians choose their style of dress and fix
their hours of sleep
And tell you when they ought to laugh and when
they ought to weep,
Their every eccentricity is catalogued and filed
For the modern type of baby is a scientific
child!
Time was that mother raised them in a rather
casual way,
With a bit of help from grandma—but that
isn't done today;
The bringing up of babies is a far from simple
art,
And you need a dozen volumes and a blueprint
and a chart
A clinical thermometer, a stethoscope, a scale
Some test tubes and a dictaphone that registers
each wail,
The modern mother's regimen is very far from
mild,
For the baby of the present is a scientific child!
Oh, yes, I am describing the *modern* baby now!
Oh, the old folks sniff about it and the jesters
jest a lot
But the modern type of baby is a healthy little
tot,
He may be robbed of baby-talk, of many pats
and kisses,
But there's a heap of colic and other ills he
misses;
And in spite of all the sentiment that in our
cosmos lurks
There isn't any question that the modern method
works—

For the scientific baby is a husky little tad,
A credit to the doctor, and the mother, and the
dad!

—Copyright S.M.A. Corporation, Cleveland, Ohio.

S.M.A. is frequently prescribed for modern infants
because S.M.A. is recognized by most physicians to be
the nearest existing approximation of mothers' milk.
No directions are given on the lay package. Moreover,
each can bears this statement: "Use only on order and
under supervision of a licensed physician. He will
give you instructions." It is an ethical product being
advertised only to the medical profession and sold ex-
clusively through prescription pharmacies.

CAUSE OF OBESITY

In order to study obesity satisfactorily, it was nec-
essary for L. H. Newburgh, Ann Arbor, Mich. (*Jour.*
A. M. A., Dec. 5, 1931), to devise methods for the
measurement of total heat production and of water
exchange. After an accurate record of the inflow and
outflow of energy, organic solids and water had been
obtained, it was found that the actual body weight
always corresponded with that required by the condi-
tions. The author believes that there is no specific
metabolic abnormality in obesity. All obesity is "sim-
ple obesity". The increase in weight merely represents
an inflow of energy greater than the outflow. Failure
of the primitive instinct to adjust the inflow of energy
to the bodily needs is always the immediate cause of
both leanness and obesity.

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SYMPOSIUM ON DISEASES OF CHILDREN

HEALTH HABITS FOR CHILDREN*

M. M. McCORD, M. D.
Rome

This paper intends to carry out the ideals of Health Education Week, which we have just observed throughout our state. In other words, this is an appeal to the physicians of Georgia to instruct mothers as to the importance of having an early examination made of their children. We have not taken sufficient time in the past to stress the necessary facts in safeguarding the health of children.

A babe comes into the world with human instincts, but with no fixed habits. Very early it begins to form habits whether or not any effort is put forth by the mother. If something is not done at first to develop habits for the protection of health, the child will drift into those which are opposed to the best interest of his or her physical condition.

Every doctor recognizes that many factors enter into the chances of a child enjoying a healthy life. A large percentage of infants are born with low resistance. The mother, as a rule, does not realize this until she compares her baby with that of another and finds that, although both children are about the same age and have been fed alike, the other child is the more healthy of the two. Physicians are often confronted with such cases.

The first point to consider is this: every newborn infant, regardless of how healthy it seems to be should have a thorough physical examination. Then, too, the mother's milk should be tested to see that the food value is sufficient. However, there is no fixed fat percentage of breast milk required for a baby to do well. Some will make a much better progress on a much lower fat content than others. In some cases infants appear to almost

starve on breast milk with 2 per cent fats, while there are others who are well developed when taking the same quality of milk. I have also observed infants on a 4 per cent fat of breast milk with fatty indigestion while with a lower fat they do well. A check-up of the baby's condition at birth, and an examination of the mother's milk will furnish information to the doctor if the baby should fail to digest the milk and make a proper gain. I reiterate that every newborn should be given a thorough physical examination, plus the examination of the mother's milk. If the attending physician does not care to make such an examination he should promptly refer the case to some one who will give it his personal attention, in order to start the baby off right.

In considering physical examinations, we realize there are circumstances which require some infants to have a more thorough examination than others. Every case should be given the routine checking over, and the examination should not be considered complete until all tests are applied. If there should be any strong evidence of lues, the mother's blood and the child's spinal fluid should be examined. The eyes and nostrils of the infant should be tested for evidence of gonorrhoeal infection. After the examination is completed the doctor should inform the parents so as to have their full co-operation. It would be too late to tell them after the baby is covered with sores or becomes blind in one or both eyes.

One of the greatest evils the human body has to fight all through life is constipation. There are many causes for constipation; however, most of the cases can be prevented by habit training in early life. Every physician knows that the infant's bowels should have a daily evacuation, and the best time is during the early hours of the morning, but how few ever stress the importance of this. I believe

*Read before the Medical Association of Georgia, Augusta, Ga., May 15, 1930.

that one normal bowel movement in the early morning is worth two in the afternoon. The infant should have a daily schedule made for it in regard to its bath, bowel movement, feeding periods, sleep, drinking water, sunshine bath, etc. If the baby's bowels have not acted by 8 a.m. it should be given a small suppository, thereby helping it to have a movement. This routine should be followed daily at the same time every morning. If a teaspoonful of mineral oil with agar agar is given just before the 6 p.m. feeding the day before, it will usually cause an evacuation by 8 o'clock the next morning. After the baby is two months of age it should be placed over a little commode every morning. If this is kept up regularly at the same hour each day the baby within thirty days will always be ready for the morning movement just as soon as it is placed in its accustomed position. This is called cultivating the habits. I have had happy results with such cases. On the other hand mothers have brought their children to me who were three years of age with diapers on. That particular mother usually makes the statement that the child had never used anything but the diaper for the natural movements from the bowels and kidneys. Such a practice is due to carelessness of the attending physician and the mother, and it likewise teaches careless and insanitary habits with the child.

All of us find many babies in our practice who are allowed to nurse the breast or to be fed *ad libitum*. When the physician asks the mother how often she allows the baby to nurse she generally says, "Any time it wants it." God knows when the baby wants it, but how on earth does the baby know? We must train the mother that every whimper of the baby is not a hunger whimper, for there are many things which will cause a baby to be fussy and restless besides hunger. Many mothers use their breast as a pacifier for the baby. Such a practice may quiet some of the babies for some of the time, but sooner or later trouble will arise from digestive disturbance from irregular habits. A full schedule will give the mother a daily program telling when and how often and how much to feed the baby. If the baby is bottle fed the schedule should give the mother specific directions as to how the food should be pre-

pared, and how much and what hours for feeding. Most mothers will follow a written formula when they will not notice an oral one.

Infants not only should be trained to take their food at regular periods, but also to acquire the habit of a balanced diet. Many mothers fail in their duty along this line, but usually the blame is traceable to the attending physician for not giving specific directions. Practically all physicians agree now that babies should be completely weaned by the end of the first year. The doctor must prepare for this very early in the child's life. Well cooked cereals should be started about the sixth month, vegetable broth or strained vegetables about the eighth month, vegetables forced through a wire sieve by the tenth month, baked apple, apple sauce, prune juice, stewed apricots, coddled egg, white meat of young chicken, beef juice, from the tenth to the twelfth month. It is very important that breast fed babies begin taking modified milk by the eighth month. This may be given as sterilized Holstein milk or one of the dried milks may be used. At eight months, I usually begin by complementing the breast feedings with four ounces of milk just before each nursing every four hours during the day, and give six ounces at ten months, and then by twelve months I can give eight ounces of the modified milk and omit the breast feeding entirely. If the milk is given just before the breast feeding while the baby is hungry it will usually take it and develop a liking for it. As the amount is gradually increased the baby begins to care less for the breast, and about the twelfth month he voluntarily weans himself. It is much easier to work the gradual weaning if the milk and all other foods are given before the breast, otherwise it will be hard to get the baby to take a sufficient quantity of milk and other foods.

One of the greatest errors I find in a baby's diet is that the attending physician has failed to impress the mother with the importance of fresh vegetables and fruits. The child needs these foods for his bodily development, and if they are begun early the infant soon learns to like them. Of course, in many localities it is practically impossible to get fresh vegetables and fruits on the market,

especially prepared for young children. I have used some of Geber's and Clapp's canned vegetables and can recommend both highly. They are properly seasoned, most babies like them and they are ready for use with little heating. The only preference I would make to Clapp's is that his canned vegetables are handled, as I understand it, only through drug stores, which would give the physicians an opportunity to keep a better check on it than the canned vegetables carried in grocery stores, where it would be easy to get substitutes and give the baby such foods too highly seasoned. It might also be stated that Clapp's vegetables are canned in glass containers, which have some advantage over buying vegetables in tins for infants. The mother, as well as the doctor, can see just how the vegetables look and can very often determine if they are well preserved.

We are approaching the era of preventive medicine. Mothers should be taught to carry their babies to the doctor at regular intervals for a complete checking over, and for additional help on the feeding schedule. Many mothers have not learned that it is better to carry the baby to the doctor's office at regular stated times for examination and advice on how to keep the infant well, rather than wait till the child is very ill, and, as a last resort, call the doctor. There are many mothers who feel that it is a reflection on their intelligence to take the baby to the physician until they have tried all of their remedies and failed. It might be said that the lowering of infant mortality within the past ten to twenty years comes about largely by mothers keeping better informed on the proper care of their babies through regular periodical visits to have the doctor check them over. The time will come when it will be considered a disgrace, particularly to the attending physician, for the baby to be ill of a preventable disease. We should train the mothers that the young child should have the protection offered by regular periodic examinations. This education work may be agitated by many journals, magazines, welfare organizations, etc., but after all, the work of stressing the importance of regular periodic examinations is up to the active medical men, therefore we should all awake to the great

possibilities of our profession if we do our duty.

Many mothers are now calling on their doctors for a complete examination of their apparently healthy children. If the physician sneers at the idea and says, "Wait till the child gets ill before getting alarmed," she will go to a medical man who is at least progressive in his ideas. The greatest opportunity of the physician of this age is to help warn the public of the dangers of preventable diseases, and also show the masses the importance of regular periodic examinations as a wise step in helping the individual safeguard his own health. This is an opportunity for real service, and every physician should give his whole-hearted co-operation.

A CRITICAL PERIOD OF CHILDHOOD*

THOS. BOLLING GAY, M. D.

Atlanta

The aim of this discussion is to emphasize the need of precautionary measures in dealing with children of from 5 to 10 years of age. The physical condition of children of this age will be compared to the physical condition of children of other ages from birth to 14 years. As certain factors seem to play an active part in the lives of the 5 and 10 year old group, these will be discussed in connection with the actual physical findings. Some suggestions will be made as to the type of precautionary measures which seem advisable.

I have included in the group studied children who were under my care from August, 1924, to February, 1927. All of the children received one complete physical examination and a great many received several. The number of white children is somewhat larger than the number of colored children, but the children white and colored are remarkably well distributed as to age. The age distribution is shown in Table I.

To demonstrate that children 5 to 10 years of age travel a road of great stress and strain, instead of pointing out the number of deaths as statisticians do with mortality rates, attention will be called to the wounds

*Read before the Medical Association of Georgia, Augusta, Ga., May 15, 1930.

and scars of the children who are pushing forward along the way.

Only three scars or pathologic physical findings seem to warrant attention in this discussion.

An estimate of the state of nutrition gives us one way of telling what sort of physical battle a child is enduring or has survived. During or after a debilitating illness we do not expect to find a child with clear bright eyes, good color, subcutaneous fat in sufficient quantity to make him look plump, and normal muscle tone so that he maintains a well-balanced erect posture. Malnutrition, therefore, with its poor color, reduced subcutaneous fat and muscle tone, has been used as one of the signs of trouble. We find a very definite increase of this condition during the 5 and 10 year period. (Chart I.)

Another warning signal in children that a physical struggle is or has been taking place is enlargement of the cervical glands. These glands are probably the most sensitive indicator that we have. They become enlarged during infections of the nose and throat, during infections of the ear, and during the course of contagious diseases. Theoretically they may increase in size as an exaggeration of normal growth, that is, as a benign hypertrophy. Moreover, they may be involved in the process of developing active immunity to the numberless strains of organisms to which the child is exposed in schools, moving picture shows, and churches. Whatever the cause of the enlargement, there is a rapid increase in the incidence of enlargement of the cervical glands during the 5 to 10 year age period. (Chart II.)

One of the conditions usually considered a result of disease or of abnormal physical condition is dental decay. A great many people still consider decay of the primary or deciduous teeth a natural process to be expected in the case of any child. Through the work of Cross,¹ of the Forsythe Dental Clinic and others, this opinion has been largely discredited. The consensus of opinion now is that the deciduous teeth normally stay intact and come out, undecayed, due to the pressure of the erupting permanent teeth. The curve of incidence of decay of deciduous teeth closely approximates the curve of incidence

of malnutrition and cervical gland enlargement in rising during the 5 to 10 year period. In addition during this period there is also a definite rise in the incidence of decay of permanent teeth. The increase in the occurrence of dental decay can be seen in Chart III.

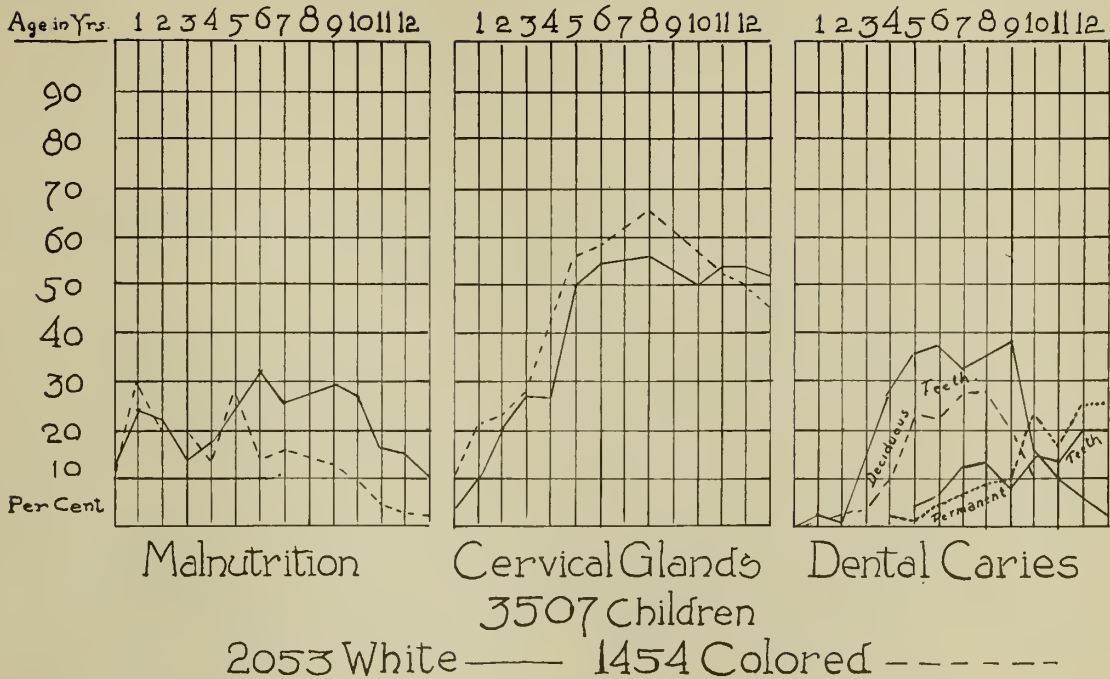
It is beyond the purpose of this paper to discuss the increase in the number of cases of adenoids and like conditions which occur during this period. It should be mentioned, however, that they do enter into the vicious circle which is in operation, as in the following cycle of events. Measles or scarlet fever may leave infected adenoids, tonsils, or sinuses. These in turn may lead to malnutrition. Malnutrition may result in decayed teeth and abscesses of the gums, which may lead to a more advanced state of malnutrition, or to additional infection of tonsils and adenoids. This circle makes the child more susceptible to the invasion of other contagious diseases. Such a succession of troubles is not uncommon at this age. It is easy to find in our daily practice many children who have devastating successions of illness even without the chronic infections of the nose and throat. One little five-year-old patient of mine who has always been thin but active has during the past winter had scarlet fever, mumps, and measles. He has found time in between these illnesses to break his arm twice and suffer an attack of otitis media.

Contagious diseases constitute the greatest menace during the five to ten year period. Studies of age incidences show that most of the cases of all the contagious diseases occur just prior to or during this period. Ker² stated that Brownlee of Glasgow Fever Hospital reported that of 12,000 cases of measles, 10,000 occurred before the age of 10 years and 5,000 of these were in children 5 to 10 years of age. The largest number of cases of scarlet fever occur during the 5 to 10 year period.³ Claude Ker⁴ has found that diphtheria is essentially a disease of the first ten years of life. The statement is acceptable that most children 10 years of age have had all of the contagious diseases that they are going to have. These diseases along with infections of the nose and throat are evidently responsible for a large part of the malnutrition, cervical gland enlargement and dental decay found. The impairment of vision and

CHART I

CHART II

CHART III



hearing usually discovered later on in child life may also as a rule be traced to them.

No contagious disease can be regarded lightly at this age. Recently I have seen permanent nerve-deafness, orchitis, and meningo-encephalitis as complications of a condition so lightly considered as mumps. One of my colleagues during the past winter had a patient with chicken pox who would probably have died of hemorrhage had he not been given repeated transfusions. It is not necessary to mention the complications and sequelae of scarlet fever, measles and whooping cough.

Occurring in rapid succession as they do during the 5 to 10 year old period, it is essential that a child with a contagious disease to be put to bed as soon as possible. He should be closely observed by the attending physician throughout the course of the disease, and given a short period of rest in bed following the disease. It is most important that he should not go back to school to be exposed to other diseases until he seems to have recovered his normal health and vigor. Too frequently we see children of this age up and about as soon as their fever has subsided or dragging their way along to school trying to keep up with the other children. Later we may see them in bed again or at a hospital

with some prolonged illness. The overstressed scholastic training acquired during the time secured by rushing a child back prematurely to school fails to balance the pounds of flesh which Shylock Nature invariably requires for it.

The recent realization of the need of a careful physical examination of the 5 year old and correction of his defects before entrance into kindergarten has improved the situation considerably. The opinion has been expressed, and my experience coincides with this view, that careful medical supervision of children of the 5 to 10 year age group would obviate the necessity of spending much time on the older school children. If this be true our cities would do well to consider how the money devoted to health maintenance in the public schools is being expended.

The proper care of children of 5 to 10 years in the home is somewhat complicated in that they have attained personalities of their own. Children of this age have very decided likes and dislikes and are not slow in expressing them. Parents are prone to consider them as being about half grown and to treat them more or less like adults. The children themselves are often allowed to decide when they are sick, when they are well enough to get up, and when they have strength enough

to go to school. We as physicians are partly responsible for this attitude for we are apt to assume it ourselves. We should therefore make a special effort to inform parents of the necessity of precautionary measures at this age.

A fuller knowledge of this age and the present system of medical supervision of school children place responsibilities on the medical profession. The health supervision in the public schools should be revised so as to give more attention to children during this period. A realization of the state of knowledge and of the general attitude of the average parent emphasizes our responsibilities. It would seem wise for our societies in radio talks and in newspaper articles to devote a portion of the public education program to this age. Finally, we practitioners should inform parents of the need for caution in the treatment of all illnesses and physical defects of their 5 to 10 year old children.

AGE DISTRIBUTION

Age (Yrs.)	White	Colored	Total
Under 1	218	120	338
1	106	60	166
2	85	42	127
3	86	36	122
4	103	58	161
5	275	158	433
6	205	143	348
7	180	127	307
8	158	107	265
9	145	118	263
10	141	109	250
11	152	133	285
12	109	122	231
13	90	121	211
Total	2,053	1,454	3,507

Table I

Summary

A series of 3,507 children has been studied.

Indices have been chosen as evidence of physical strain.

It has been found that:

Malnutrition reaches a maximum during the 5-10 year period.

Cervical gland enlargement reaches a maximum during the 5-10 year period.

Deciduous decay reaches a maximum during the 5-10 year period and decay of permanent teeth starts at this time.

The contagious diseases are an important factor during this period.

Attention should be concentrated largely on this period in school health programs.

Parents should be informed by their physicians as to caution necessary with children of this age.

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4. Ibid, page 373.

ALIMENTARY ANEMIA*

WM. WILLIS ANDERSON, M. D.
Atlanta

Alimentary anemia ^{1, 2, 3, 4}, is a condition existing in early childhood in which there is an insufficient supply of iron from which to form hemoglobin. A child may be born with a congenital anemia ^{5, 6}. In both of these conditions there is a marked deficiency in hemoglobin, the red cells, white cells and platelets being relatively normal, except that the red cells are pale. It is conceivable that an infant may be born with defective or incompletely developed blood-forming organs, but the presumption, at present, is that the diminution of hemoglobin is due to an insufficient store of iron in the liver at birth. This insufficient supply may be due to anemia in the mother, an insufficient supply of iron in her diet, or to some disturbance of iron metabolism. It is especially likely to occur in premature infants, in whom there was not time for accumulation of a normal supply, and in twins, between whom the supply has to be divided.

Under ordinary conditions an infant is born with sufficient iron stored in the liver to supply its needs for six months. Unfortunately, the amount of iron in either human milk or cow's milk is not sufficient to meet the needs of an infant. Mackay³ reports that the average hemoglobin percentage in the blood of fairly healthy artificially fed infants in London shows a sharp fall from the 110 per cent at birth, that has been shown by many observers, to about 65 per cent at the age of two or three months, a rise

*Read before the Medical Association of Georgia, Augusta, Ga., May 15, 1930.

to 70 per cent at five to six months, and then a steady fall to about 65 per cent when the child is a year old. The continuous administration of iron, beginning when the infant was less than two months old, raised the average hemoglobin percentage to about 80 per cent by four months old and onwards. He states that the selection of iron is important and finds that iron and ammonium citrate prove effective. The iron contains a trace of copper.

Copper has received considerable attention in recent years, since the investigations of Steenbock⁹ and others. Its addition to iron more rapidly increases hemoglobin in rats. Some observers feel that it is the impurities of iron, i.e., copper, that has been responsible for the increase in hemoglobin in the past. It seems entirely probable that we will be giving minute doses of copper to anemic babies in the near future. Up until the present time I have had no personal experience in adding copper to iron given to children.

The following, selected at random, are characteristic of alimentary or nutritional anemia:

CASE REPORTS

Case 1.—J. W., a white boy, aged about 16 months, was first seen on August 3, 1928. His mother stated that he had been anemic since birth. The mother, father, five brothers and sisters were all living and well. There were no tendencies to familial diseases. He was one of twins and at birth weighed 6 $\frac{3}{4}$ pounds. His twin brother was slightly smaller, weighing 6 $\frac{1}{4}$ pounds. Both babies were breast fed exclusively for two months, after which they were weaned because "the breast milk did not agree with them". They were put on a sweetened condensed milk mixture until 15 months of age, when the patient's anemia seemed to become more severe. His physician then put them on raw cow's milk, cooked cereals, broths, toast, green vegetables, butter, and light desserts. Of these foods, however, he ate sparingly. The twin brother was brought along for comparison. On a casual examination, he seemed to be in good condition, weighing 22 pounds, compared to the patient's weight of 16 $\frac{1}{2}$ pounds, and was of good color and disposition. On physical examination the patient was extremely pale, cross, fretful, and crying. The anterior fontanel was not quite closed, and was sunken. Examination of other parts of the body, except the abdomen, revealed nothing of note. Both the liver and spleen were enlarged. The spleen extended about 1 cm. below the costal margin in the left mammary line and was smooth and regular in outline. The liver was about 2 cm. below the costal margin in the right mammary line. It was smooth and regular.

The examination of the blood was as follows: R. B. C., 4,540,000; W. B. C., 12,900; hemoglobin, 28 per cent (Dare). Differential: Polymorphonuclears, 21 per cent; eosinophils, 0 per cent; basophils, 0 per cent; small mononuclears, 76 per cent; large mononuclears, 2 per cent; transitionals, 1 per cent.

The stained specimen showed marked achromia of the erythrocytes, fairly well marked anisocytosis, some poikilocytosis, and moderate basophilia. The platelets seemed somewhat reduced. The polymorphonuclears resembled transitional types. One nucleated red blood cell was seen in counting one hundred cells.

Other laboratory reports, including blood Wassermann reaction, urinalysis and a roentgenogram of the chest for malignancy, were negative.

In spite of the unusual blood picture, confirmed some five or six times, he was thought to be suffering from a severe secondary anemia, in which improper feeding may have had an important part. Consequently, he was admitted to Wesley Hospital for blood transfusion. On account of his emaciated condition, intravenous administration was found difficult and he received two intraperitoneal infusions of whole blood: one of 100 c.c. on August 5th and the other of 300 c.c. on September 5th. Since his mother preferred to be with her other children at home, he spent only twelve days in the hospital.

Following his blood infusions, his hemoglobin increased as follows: August 14th, 58 per cent; August 22nd, 60 per cent; September 5th, 55 per cent; September 10th, 90 per cent.

He was fed boiled cow's milk, fruits, green vegetables, lettuce, celery, light desserts, toasts and breads, and was given five grains of reduced iron three times a day.

On August 14, 1929, one year after his first visit, the blood reports were: R. B. C., 5,003,000; W. B. C., 7,850; hemoglobin, 80 per cent (Dare). He weighed at this time 27 pounds and was 33 $\frac{3}{4}$ inches in height; his twin brother weighed 27 pounds and was 34 $\frac{1}{4}$ inches in height. Physical examination was essentially negative; his liver and spleen could not be palpated. His mother stated that he was well in every way.

Case 2.—D. G., a white boy, aged 3 $\frac{1}{2}$, was first seen on November 2, 1929, suffering from acute tonsillitis. His father was connected with a large merchandise house and he had lived in several different cities. His father, mother, and one sister were living and well. There were no tendencies to familial diseases. His birth weight was 7 pounds. He was breast fed for some nine or ten months, then weaned and fed boiled cow's milk. Of this, he took large quantities, as much as a quart and a half daily, usually to the exclusion of other foods. He had developed fairly normally, although he was about two pounds under his ideal weight, weighing 29 $\frac{1}{2}$ pounds. His height was 37 $\frac{1}{4}$ inches. Other than an occasional intestinal upset and one other attack of acute tonsillitis, he had always been well.

His lips and mucous membranes were pale. There

was a small superficial ulcer in his mouth, which quickly healed with silver nitrate. His tonsils were moderately enlarged and ragged. His liver was about 1 cm. below the costal margin in the right mammary line; his spleen was enlarged, and was felt about 2 cm. below the costal margin in the left flank. It was smooth and regular. Physical examination revealed nothing else of note.

His blood examination was as follows: R. B. C., 4,810,000; W. B. C., 11,500; hemoglobin, 45 per cent (Dare). Differential: Polymorphonuclears, 34 per cent; eosinophils, 0 per cent; basophils, 2 per cent; small mononuclears, 58 per cent; large mononuclears, 0 per cent; transitionals, 6 per cent. The red cells showed a lack of hemoglobin. A search for malarial parasites revealed none.

He was given reduced iron, five grains three times a day for fourteen days. At the end of this time his hemoglobin had increased only 5 per cent up to 50 per cent. Then exposure to a mercury-quartz lamp was started. His increase in hemoglobin was much more rapid, as the following figures will show:

	Per Cent
Nov. 2, 1929.....	45
Nov. 15, 1929.....	50
Dec. 6, 1929.....	78
Dec. 13, 1929.....	78
Jan. 17, 1930.....	85
Feb. 1, 1930.....	80

The etiologic factor in his anemia was probably an over-consumption of cow's milk and a lack of other iron-containing foods, such as lettuce, celery, green vegetables, and fruits. During the period of observation, the amount of milk was restricted to a pint and a half a day, and more leafy vegetables, including lettuce, were taken. Along with his increase in hemoglobin, his mother noted a marked change in his entire disposition. His appetite increased tremendously and where he had formerly been cross and irritable, he now played and was happy. His weight did not increase as rapidly. He showed a gain of 1½ pounds in January, two months after his treatment was started. When examined last, his spleen could not be palpated.

Case 3.—On a dairy inspection tour a few years ago a very intelligent dairyman asked me why his little girl did not grow and develop. She was under weight, pale and anemic, and he, with his abundant supply of excellent milk, had been giving her as much rich milk as she would take, frequently two quarts a day. By reducing her consumption of milk to a pint and a half daily, she promptly began to gain in weight and to be of good color.

Case 4.—B. B., a white boy, aged 4½, was first seen on February 26, 1930. His chief complaint was anemia. His father and older brother were living and well. His mother was accidentally burned to death in her home when this child was six months of age. His stepmother could not give me the details of his early diet other than he was under good medical supervision and was fed boiled cow's milk. He has always had a "finicky" appetite. His birth weight was 7

pounds. One year prior to this visit he had received injections for whooping cough. It could not be decided whether he had had whooping cough or not, but it was thought a mild attack. Later he had malaria and was given quinine for a long time. After this searches for malarial parasites were negative. At this time his hemoglobin was reported 37 per cent. Otherwise he had always been well.

He was slightly larger than his ideal size, being 41½ inches in height and weighing 43 pounds. His lips and mucous membranes were pale. He had a slight coryza, a thin nasal discharge and slightly enlarged tonsils. The edge of his liver could just be felt. His spleen could just be felt 1 cm. below the costal margin. Otherwise, physical examination was negative.

His blood count was: R. B. C., 4,750,000; W. B. C., 9,600; hemoglobin, 35 per cent (Dare). Differential: Polymorphonuclears, 42 per cent; eosinophils, 6 per cent; small mononuclears, 47 per cent; large mononuclears, 0 per cent; transitionals, 5 per cent. Careful examination of his stools revealed no evidences of intestinal ova or parasites. Searches for malarial parasites were consistently negative.

On account of the history of malaria, he was given three grains of quinine daily for six weeks in spite of the absence of the plasmodia in his blood. He was given reduced iron, five grains, three times a day. His hemoglobin increased rapidly, as follows:

	Per Cent
Feb. 26, 1930.....	35
March 15, 1930.....	55
March 29, 1930.....	75

As in Case 2, a marked improvement in his general make-up was volunteered by his mother. His appetite became ravenous. Formerly he was an unusually well-disciplined child. At his last visit his mother stated that he was so mischievous that she could scarcely manage him. He misbehaved in his kindergarten so frequently that he had to be kept in after hours. The large dose of reduced iron proved to be constipating and he had to take mild laxatives.

On account of the history of malaria, the diagnosis in this case cannot be so clear cut. However, his rapid response to iron, sunshine, diet, and hygiene leads us to believe that his anemia was probably a nutritional disturbance. At the last visit his spleen could not be felt.

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DISCUSSION—SYMPOSIUM ON DISEASES
OF CHILDREN

Dr. Linton Gerdine, Athens, Ga.—This is a very interesting group of papers on a subject that cannot too often be discussed—the constant care and attention to the child from birth through the developmental years.

I agree with Doctor McCord and wish to strongly emphasize the value and necessity of early complete physical examination of the new-born, and frequently repeated complete examination of the infant and young child. I wish, however, to emphatically disagree with him on the advisability of examination of the mother's milk. In my opinion it is not only valueless, but often harmful. The work of Doctor Macy and others at the Children's Hospital of Detroit demonstrates that the qualitative analysis of a mother's milk shows such a remarkable variation, not only at different nursings but also at different parts of each nursing, that an examination as commonly made gives not the slightest idea of the food content of the milk. The baby is much more reliable than any laboratory can be. Usually when the baby is not thriving on the mother's milk it is a question of quantity rather than quality and this can be easily remedied with complemental feedings. Too often is a baby stopped from breast feeding and tried on various formulae with more rather than less discomfort, simply because a laboratory report seemed to indicate that the breast milk was not properly balanced. Try correcting the nursing methods, give additional food if necessary but leave the baby at the mother's breast, regardless of the amount of fat, proteins, and carbohydrates in her milk.

It is surprising how early habits are formed and therefore very necessary that good habits be encouraged and bad habits discouraged from the very start of life. This is another reason for the early addition of different foods to the infant's dietary. By starting these good habits early, and these excellent foods, we will find many of the problems Doctor Gay speaks of will not occur. Neither will we find the anemias showing up so frequently. There are many interesting studies of foods now being made to discover their content in other minerals than iron, so the wide-awake physician can recommend various foods now for every definite purpose. I have under observation one very interesting case of anemia in a child, aged 10, which is responding beautifully to diet plus metals: iron, copper, etc.

Get the infant young, examine him carefully and frequently, do not interfere too much with his natural food, teach him good habits, and you can watch him grow naturally strong and healthy, with very few distressing problems.

Dr. A. J. Waring, Savannah, Ga.—In the short time at my disposal for discussion I wish to lay emphasis chiefly on the paper of Doctor Anderson. We see a great deal of anemia among children in South Georgia. All of us are doctors, but not many of us have been patients. I think it is important to put ourselves in the attitude of the patient. When a

mother brings in a sick child she wants to know, first, what is the matter; second, whether it is curable, and third, whether the doctor can cure it. There is more than one road that leads to Rome and I think it is important in these cases to have a definite method. I wish to outline a little the methods I use.

In so far as the infantile cases of anemia are concerned, we must first consider syphilis because in our day of masked syphilis we do not have the florid variety of olden times. Sometimes these syphilitics show only anemia. The next thing to think about is malaria. The next is pyelitis. I know of nothing, particularly in the female child, that will give such a pronounced and long-standing anemia as will pyelitis. Fourth on the list is rickets. I wish to ask Doctor Anderson if some of the children in the case histories he cited did not show rickets. Fifth on the list is prematurity; these children all have anemia and the vast majority have rickets. Sixth is diet and hygiene. When you come to juvenile cases I wish to place hookworm first, then sepsis and the conditions such as have been described by Doctor Gay, the rheumatic fevers, of which we see comparatively little in the far South, and those cases of climatological character which we think comprise a large group in South Georgia. In my last 200 cases 90 per cent fell into the dietetic and climatological classes. I find that in the warm and semitropical climates in the spring of the year many children have a distinct and seasonal fall in hemoglobin content.

The plan of treatment I recommend consists, first, in sleeping out of doors, day and night, winter and summer; I think there is nothing more valuable for any child. Second, light clothing. Third, in the spring and summer anemic children should be sent to the seashore or the mountains. Fourth, marked emphasis on proper diet and vitamin requirements. Fifth, sun baths.

Of course I find hemoglobin determinations very useful. When the hemoglobin is over 50 per cent I usually use iron and ammonium citrate in doses of 2 to 5 grains by mouth, or iron citrate, $\frac{3}{4}$ to 1½ grains intramuscularly. If there is not a ten-point rise in the hemoglobin in three weeks I transfuse. When hemoglobin is below 50 per cent I transfuse immediately. I have found these methods less effective in handling simple anemias in infancy and childhood.

Dr. Joseph Yampolsky, Atlanta, Ga.—Speaking of Doctor Gay's paper, I wonder whether there is not some misconception of malnutrition and under-nutrition. In my opinion one of the causes of malnutrition may be under-nutrition. I would say, then, that 15 per cent of malnutrition is due to under-nutrition and that infected tonsils and adenoids will play a part in forming the whole cycle of malnutrition. My advice to the physician as well as to the family who goes to the physician is that at all times a complete history, including all details, should be taken. This will not only lead to finding out the conditions and diseases the child may have had, but also the social conditions and health conditions

of the family and the home environment, and we can then carry out a complete line of physical therapy.

I wish that in Georgia we might start a series of malnutrition clinics. I believe that 40 per cent of the children in Georgia suffer from malnutrition. These clinics should be conducted by physicians who can go into the health and social surroundings of the people and help in correcting them. Many conditions aside from nutritional difficulties will cause anemia. I believe the physician is quite responsible for the condition which is called "nutritional dietetic anemia". We have emphasized the drinking of milk more than is necessary. I find that many of these patients begin to improve as soon as we remove the milk from the diet. We should not force these children to drink milk to a greater extent than they can take care of. If we try to give them too much, the result is that they do not take enough milk for sufficient nourishment, and they will not take any other food. Then we have to give iron and other tonics. I think these cases can be cured very quickly, and that many children who are suffering from alimentary anemia can be relieved if they are put on a proper diet. If the societies who are interested in this and are pushing milk, the Parent-Teacher Association and the dairies are acquainted with the fact that not all children can take care of the same amount of milk it will be very helpful in preventing these cases.

Dr. George L. Echols, Milledgeville, Ga.—I take this occasion to express my appreciation of this series of papers, and at the same time refer mainly to the ideas contained in Doctor Gay's paper.

In this clinical work the school nurse is indispensable, and it is very necessary that she have sufficient special training. Another advantage we will have along these lines, in years to come, will be the visiting teacher, as she will be the one who carries the necessary information to the parents and plans co-operation between the home and the school clinic.

Varying from one-half of 1 per cent to 2 per cent of our school children are abnormal mentally, due to a number of causes, for which the child is by no means responsible. Coming from a poorly adjusted home, with inadequate mental equipment, when he goes to school he is unable to adjust himself and appropriate, in a normal way, what the school has to offer. A large percentage of this group will in later life be the inmates of our State institutions, both penal and mental.

Dr. William A. Mulherin, Augusta, Ga.—Doctor McCord well stressed the importance of health habits. There is a difference, however, in feeding a baby every three and every four hours. Some maintain that one plan is correct, while others prefer the longer interval. They are both correct. In Europe, babies are fed every four hours regularly from the time they are born, and babies will get as much milk in the four-hour feedings as in the three-hour, for they get a little more each time they nurse, and the end results will be the same.

Doctor Gerdine does not get much value from the

analysis of breast milk. My experience has been much the same. If we remember that the crucial thing about breast milk is to have the baby thrive on it that is all we need. If the baby thrives it is the right milk for the baby whether it reaches a certain point in an analysis or not.

Another point made by Doctor McCord, and he made some very good points, agrees with my experience, and that is that at six months every mother needs help. Doctor McCord does not start this, as a rule, until eight months, but I think babies do not thrive properly after six months without some artificial food. I think any good pediatrician can beat the mother in feeding a six-month-old baby. I believe that at the end of nine months the baby should be off the breast entirely and if you watch the weight carefully you will find that you get excellent results.

Another point about feeding is that we should allow the babies to get hungry. We are creating a condition in America so that mothers come in and say, "My baby will not eat; I wish you would give it a tonic." It is not a tonic the baby needs, but a rest. If someone ran after us all day urging us to eat something we would want to tell them to go away with that food, but that is just what the mother does to the baby. The condition is unnatural. We should treat the baby as we do the little dog, as it pertains to eating. We should let the baby get hungry. Eating is an animal act, and if we treat it as such we will get good results.

As to weighing babies, a great deal has been accomplished by physicians, but they are today doing a great deal of harm. We should not tell the mother that a baby is ten pounds under weight. We cannot be sure of that. There are two types of individuals, the tall and slender, the wide and stout. If the parents are tall and slender the child probably will be that way, and if they are the opposite the child is most likely to be the same.

Doctor Anderson gets splendid results from his diet, but I think as good can be obtained in other ways. I have found it very helpful to give an anemic child egg yolk, which has more iron in it than is contained in spinach. I am not decrying spinach or green vegetables. They are good. I think prune pulp is an excellent food for children and it is of great assistance in keeping the bowels in good condition.

Dr. Theodore Toepel, Atlanta, Ga.—In regard to the pallor and the annual physical examination of the pre-school and school child. In lecturing to the Parent-Teacher Association the question has been put to me quite often, "Doctor, is that sufficient?" I think we establish a false security by these annual physical examinations. I think the parents should be told that these annual examinations, which are often done hurriedly, are not sufficient and they should be repeated within six months. If we could get this into the school books that the teachers use and have these children examined every six months by the school or home physician then we will be able to put the idea over that the dentists have succeeded in doing so admirably.

Last year when I was traveling in Switzerland I found that they do not use the ultra-violet light, but put the little children out in the sunshine naked. I wish to ask Doctor Anderson which he considers the most important, the ultra-violet light or natural sunshine?

Dr. R. L. Miller, Waynesboro, Ga.—I was a little disappointed that no one mentioned the care of the mother to insure that she furnishes a sufficient supply of good breast milk. We should be sure that she gets the proper food herself, plenty of rest and the necessary amount of exercise and that her environment is pleasant and free of worry. Dr. Oliver Wendell Holmes spoke no idle words when he said that the two mammary glands of the female had the two hemispheres of the brain of the most learned professor skinned a city block when it came to the manufacture of the proper food for an infant.

Dr. M. M. McCord, Rome, Ga. (closing).—I am of the same opinion as Doctor Gerdine regarding what is gained by examination of breast milk, when it comes to facts to work on. But sometimes we can get better co-operation of the mothers by assuring them after an examination that their milk is all right. It is for that reason that I resort to the examination of the milk when a mother comes to my office with the belief that her milk is no good. After the analysis, if I can tell the mother that her milk contains the average amount of nutriment, she is satisfied and goes ahead without any trouble. Sometimes we have to do such things in order to get co-operation.

In regard to Doctor Gay's paper, I think there is a great deal of opportunity offered for pre-school age work. I believe we can eliminate a lot of the danger of that critical period if we can get the Parent-Teacher Association and the medical men throughout the State to realize that much can be done in the pre-school years. I am glad to say that this matter has taken on keen interest with us at Rome, and I believe it is largely the same over the State. I think we should emphasize on every occasion before the Parent-Teacher Association that we should get the children in good condition before they are allowed to enter school.

I feel about alimentary anemia as Doctor Anderson does in reference to the milk. I think there are some children who can get along almost as well without milk as with it. There are two things I see that are wrong along this line. One is where the mother tries to raise a baby entirely on milk. Those children are flabby, just as the baby who has no milk at all, and after eight to ten months they will show the malnutrition just as the baby that receives no milk. I think if we will give a balanced diet, with meat juices and vegetables and fruit juices earlier than we have been in the habit of doing, we can overcome or rather prevent this anemia and give the child a better start in life. I suppose one of the most common things we have to contend with in treating infants is that the mothers come complaining that their babies have no appetite. I agree with the essayist and Doctor

Mulherin that the way to increase the appetite is to put the meals farther apart. I think if we will remember this when we see a child whose mother complains that it has no appetite, and insists on the meals being farther apart and no nibbling on anything between meals, we will have much less trouble along this line.

Dr. Thomas Bolling Gay, Atlanta, Ga. (closing).—A series of 1,244 cases in the pediatric ward of the Toronto General Hospital was studied as to the age incidence of diseases. The report of this study is given by Tisdall and Brown in the *American Journal of Diseases of Children*, January, 1930. The greatest incidence of disease, 10 per cent of all cases, was found in the tenth year, or at the close of the period which has been discussed.

Height-weight tables have been referred to in connection with malnutrition by Doctor Yampolsky. I believe these should be used with great caution and with a knowledge that they represent in a sense averages rather than individual normals. Clarke, Sydenstricker, and Collins found that of 506 healthy children, 16 per cent were 10 per cent or more under weight, according to the tables, and that 40 per cent of malnourished children came within normal limits. Their report is given in *Public Health Reports*, 39:518, March, 1924.

Dr. William W. Anderson, Atlanta, Ga.—The anemia I refer to is not caused by syphilis, malaria, and other diseases that cause a severe anemia. In each instance, conditions other than diet have been ruled out, both clinically and by laboratory examinations. After these, and allied conditions, are ruled out carefully we find a group in which diet undoubtedly plays an important part. For instance, one of these children had been advised to have his spleen removed, possibly because his condition was thought to be a spleno-myelogenous leukemia. On being given human blood, a balanced ration and iron, he recovered completely, and has stayed well for one year.

In these reports notice that these children were seen for the first time. I believe that you will agree with me that if we could advise mothers more frequently in reference to a balanced diet that a large per cent of these severe anemias might be prevented.

In answer to sunshine, I am convinced that it is the "shine" of choice. In the winter months, in bad weather, when sunshine is not so plentiful, the mercury vapor lamp is a very nice adjunct.

Rickets is a big subject. If we realize that in studying children, conservatively, 60 or 70 per cent will show some evidence of rickets, it is almost impossible to say whether rickets play a part in alimentary anemia or not. If you will notice, however, the youngest child in this series was sixteen months of age. This is beyond the average acute rickets age. Rickets, again, is a complex disease of nutrition.

The response that these children make to hygiene, a balanced diet, and some form of iron, whether it be in egg yolk, spinach or other forms, leads us to believe that we are dealing with a disease in which diet is largely responsible.

THE VALUE OF GRADED OR MULTIPLE STAGE MEASURES IN SURGERY

BEN H. CLIFTON, M.D.
Atlanta

Most patients possess enough resistance to withstand the trauma produced during the average operation, but it is the patient who is a poor surgical risk whom we all hope to save. The following plain, common sense facts, if borne in mind and applied intelligently, will prevent an occasional and unnecessary mortality, and will offer hope to otherwise hopeless cases.

All of us have probably witnessed a death following an illness of short duration, such as pneumonia or septicemia following a pin prick. On the other hand, most of us have observed cases which have survived a series of major insults and infections, such as a compound fracture of the femus followed by osteomyelitis, with metastatic abscesses to the opposite knee, septic pneumonia and later empyema with ultimate recovery. In the fatal cases, Nature's adaptive, protective mechanism failed, while in the fracture case it succeeded. A graded or multiple stage operation is based fundamentally on this adaptability.

The surgical cases to which it is applicable and has been applied have yielded a low mortality. Its use has extended operability and prevented death in cases once considered hopeless. The object of the multiple stage operation is to gradually mete out to the patient the minimum amount of trauma, thus allowing Nature to adapt itself, thereby preventing shock and limiting the spread of an already-existing infection or preventing an infection when a normally infected viscus is to be opened.

I will mention only a few of the conditions in which the graded procedure has worked ideally. The long, tedious, shocking brain operations are always performed in stages. In well-localized brain abscesses, the abscess is exposed, the dura opened, gauze packed in, and after twenty-four or forty-eight hours the abscess is opened. This allows Nature time to wall off the proposed

drainage track and prevents meningitis which is usually fatal. In operations about the neck, Lahey of Boston declares that a two-stage operation is the only safe method to pursue. This is particularly true in pharyngo-esophageal diverticulum. The sac is first freed and brought up under the skin and several days later the diverticulum is excised. This gives Nature time to set up about the diverticulum a definite reaction. The various planes of the neck are obliterated and when the diverticulum is opened, a fatal mediastinitis does not occur. As you know, the diverticulum is connected directly with the pharynx and is normally infected. The value of the multiple stage procedure is probably best recognized in treating the exaggerated exophthalmic goiter cases. Of course it is not as important now as it was before the use of Lugol's solution, but if there is any question as to the patient's ability to stand the operation, a graded procedure should be used.

The present status and recent progress that has been made in thoracic surgery has been due largely to the application of the multiple stage procedure. This is true not only in the long, shocking operations for lung collapse in unilateral tuberculosis, bronchiectasis, or chronic empyema cases, but it is equally true in acute suppurative conditions of the lung or the pleural cavity. One would not think of resecting all of the ribs at one time for a collapse of the lung in a weak, anemic, depressed patient. The operation should be divided into two or three stages. In acute empyema in which the pressure within the pleural cavity has gradually increased, it is highly important that the pus be withdrawn slowly, either by repeated aspirations or by the closed-tube method. This accomplishes two things: first, it allows Nature time to readapt the heart and big vessels to the reduced pressure just as they were adapted to the gradual increased pressure; second, it nearly always prevents chronic empyema or chronic pneumothorax. This I can personally testify to in the handling of about fifty cases without a single mortality.

In cases of lung abscess in which surgery is indicated, the two-stage procedure is always practiced. The first incision extends down to the pleural cavity and the parietal

and visceral pleura are sewed together or gauze is packed in, allowing Nature to produce adhesions so that when the abscess is opened, empyema is prevented. Sub-phrenic abscess is usually handled in the same manner.

The low mortality of prostatectomy today is due to the use of the two-stage operation. It is common knowledge that to do a primary operation on one who has had a urinary obstruction of long standing which has lowered kidney function means almost certain death. The urine should be withdrawn gradually and free drainage established and other rehabilitating measures instituted, thus allowing the kidney function to re-establish itself.

The graded procedure is important in the management of cases of common bile duct obstruction. The liver function is impaired and parenchymatous changes have already taken place due to back pressure. To do a long, tedious, shocking operation, adding further insult to the liver cells, will give an extremely high, unnecessary, and preventable mortality, but to establish drainage gently and allow the patient to improve for a varying length of time is the method of choice, following which the obstruction can be attended to with assurance that the patient will survive.

The resections of the gastro-intestinal track are best handled by the multiple-stage method, particularly the chronic obstructions. The proposed area for resection is brought up in the wound, the peritoneum closed around and tube drainage established above the area of resection by enterostomy. This allows the patient time to be nourished, and the inflammatory reaction around the growth subsides, thereby making the actual resection more definite and with less chance of the sutures giving way, causing leakage and peritonitis.

In all conditions in which the multiple stage or graded procedure is indicated and practiced, the general condition of the patient should first be improved. He must be nourished properly, fluid balance must be maintained, blood transfusions must be given if necessary, and proper attention given to the heart and kidney functions. If all rehabilitating measures are instituted, the oper-

ation can be done with more certainty and deliberation, giving us not only a lower mortality but better functional and cosmetic results.

However speedy, dextrous, or spectacular the surgeon may be, he can in no way compensate for the lack of proper application of graded procedures and common sense principles in the handling of patients whose threshold of safety is very narrow. Nothing in surgery is sadder than to have an unexpected mortality which might have been prevented. I believe that when we apply the multiple-stage operation in the questionable cases, taking nothing for granted and keeping the patient always within the safety zone, we can feel about as certain and play our hand with the same degree of satisfaction and comfort as the poker player can when he holds a royal flush.

JAMAICA GINGER PARALYSIS

The autopsy reports of three patients with jamaica ginger paralysis dying of other causes are presented by Raymond H. Goodale and Margaret B. Humphreys, Worcester, Mass. (*Journal A. M. A.*, Jan. 3, 1931). A study of the nerves shows an acute inflammation of one segment of the cauda equina in one case, and myelin sheath and axis cylinder degeneration of the radial, sciatic external popliteal, anterior tibial and posterior tibial nerves in all three cases. The degeneration is found as high as the gluteal fold in the sciatic nerve, but not in the anterior roots of the lumbar cord. These observations are consistent with the observations in a follow-up clinic in which it was found that all patients showed marked improvement of wrist and finger motion and little or no improvement of foot motion from five to six months after the onset of paralysis.

INCIDENCE OF HEMORRHAGE IN PERFORATED GASTRIC AND DUODENAL ULCERS

Moses Behrend, Philadelphia (*Journal A. M. A.*, Dec. 20, 1930), states that perforated ulcers rarely bleed; bleeding ulcers rarely perforate. In his opinion that to defer operation for bleeding ulcer in the hope that the ulcer may not bleed again is an error of judgment. Perforative ulcers occur more frequently than bleeding ulcers. The fact that bleeding ulcers rarely perforate and perforated ulcers rarely bleed may be explained by anatomic physiologic and pathologic observations. Anatomically, there is a bloodless area around the pylorus responsible for some of the deductions; physiologically, the exuding juices prevent hemorrhage, while pathologically the age of the ulcer determines whether it is going to bleed or not.

DIAGNOSIS AND TREATMENT OF RUPTURED GASTRIC AND DUODENAL ULCERS*

HULETT H. ASKEW, M. D.
Atlanta

Ruptured peptic ulcer seems to be on the increase. It is estimated that from 15 to 20 per cent of ulcers perforate. It is important that all who are in general practice should have the clearest knowledge of the disease which immediately threatens life. Failure to diagnose a ruptured gastric or duodenal ulcer means the loss of a man's life. Do not try to be too exact in the differentiation. It is only sufficient to determine that a surgical emergency exists and prepare for its treatment.

There are three cardinal symptoms: 1. previous history of indigestion; 2. sudden acute upper abdominal pain, with collapse; 3. muscular rigidity of the entire abdomen and especially marked in the upper abdomen and lower right quadrant.

A word is necessary in regard to the previous history of dyspepsia. These people are often in such agony that no previous events can be made to seem important to them. One may have to reserve this part of the story until after the operation. Again, it is said these patients have often had indigestion so long they have ceased to remark on it. It has been a part of their daily condition, to which they submit uncomplainingly. Some patients with ulcer, especially if in the stomach, have no previous history of indigestion.

Pain: One fourth of these ulcers have prodromal signs and symptoms of perforation. There is usually a distinct exacerbation in severity of the symptoms a few days or some weeks before. Failure of relief from food or alkali and occurrence of night pain in patients formerly free of it, together with some tenderness and rigidity in the epigastrium, are often premonitory signs. This pain, at time of rupture, is sudden in onset and is the most intense that flesh is heir to. It marks the entrance of the gastric or duodenal contents into the peritoneal cavity. The

pain is first in the epigastrium, right upper abdomen, or right lower abdomen, and then becomes diffuse. It is the reaction and not the infection that produces the pain. It is the manner in which the pain lessens and not the lessening of the pain that is of clinical significance.

Muscular Rigidity: This is due to the early irritation of the peritoneum by contents of viscera. The entire abdominal wall is rigid. In severe cases even slight pressure increases pain beyond endurance. The muscles do not recede at all from the examining finger. As the condition progresses tenderness and rigidity lessen until finally only the active site of inflammation is sensitive to pressure. Rigidity of the abdominal wall is a constant feature, in fact, it takes a fairly deep anesthetic to cause the muscles to relax. In a number of these cases, in my experience, the tenderness is often greater in the right iliac fossa.

Anesthetic: Spinocain anesthesia is my choice with local anesthetic and gas as second. Spinocain is safe in my opinion, but should only be administered by a person who has been well trained in this type of anesthesia. The advantages over ordinary anesthesia are: 1. There is practically no movement of the abdominal wall. 2. The intestines drop back to the posterior part of the abdominal cavity and are out of the way. 3. The number of assistants may be lessened as it is not necessary to pull, tug, wrestle with or pack off the intestines. There is accordingly less trauma of the peritoneum. 4. When one grasps the stomach and asks the patient to take a deep breath, with the proper incision and by using a little traction on the stomach, the perforated ulcer comes up in the upper angle of the incision. 5. Relaxation of the abdominal wall. 6. Drainage tubes stay in place where put temporarily, until one can close the abdominal wall. 7. Another very important advantage in spinocain in this type of operation is that when the abdominal cavity is opened the entire amount of spilling of the gastro-intestinal contents can be seen, except in the pelvis and in the meshes of the omentum. 8. They do not vomit large quantities of fluid as in ether and drown themselves so to speak. 9. The time of operation is shorter.

*Read before the Fourth District Medical Society, Carrollton, Ga., April 8, 1930, also in the department of Scientific Exhibits during the annual session of the Association, Augusta, May 13, 14, 15, 1930. Illustrated with motion pictures.

Operation: W. J. Mayo says that, in case of a ruptured ulcer, it is better to be operated on within twelve hours by a surgeon of little experience than by the most skillful surgeon in twenty-four hours. However, it is hard to distinguish, even at operation, between gastric and duodenal ulcers. The constriction at the duodeno-pyloric junction and pyloric vein are not usually visible. If the pyloric vein is present, this is the boundary line. I place more reliance on the palpation of the pyloric spincter by the finger and thumb of one hand to indicate the exact site of the lesion.

When the abdomen is open one's judgment must be influenced by the time elapsed since the perforation, the type, size and position of the ulcers; the interval since a meal, his opinion of the infectivity of the gastric or duodenal contents and especially by the general condition of the patient. The sterility and infectivity of the fluid must be considered. The fluid usually consists of digested food, gastric secretions, mucus and bile. All are substances noxious to the peritoneum.

In this connection the observations of Brutt in 112 cases are of importance. Six to twelve hours after perforation the exudate was sterile in only twenty-six per cent. Cases of rupture more than twelve hours before operation had sterile exudate in seven per cent only. Among the bacteria found were *Staphylococcus*, *Streptococcus Hemolyticus*, *Streptococcus Viridans* and *Bacillus Coli*.

The safest procedure is to remove as much as possible of this potential cause of peritonitis. The method of removing the fluid contents is best accomplished by the least disturbance of the abdominal contents and this method does not traumatize the peritoneal tissue. This may be done by suction; by swabbing out the large amount of fluid and by a right lower quadrant stab drainage with hard rubber tubes. The most effective method of coping with peritoneal contamination is to drain the area around the site of the perforation and foramen of Winslow and to place the patient in a sitting position. In an early ruptured ulcer with an empty stomach, of three hours duration, I close the incision above without drainage and make an incision in the lower right quadrant to drain

the pelvis. If complications develop, I should feel better with this pelvic drainage.

Report of Cases

Case 1. A laborer, aged 24, had suffered with indigestion for three years. There was a typical history of hunger pain, food ease, fullness in the upper abdomen, which would be relieved for two hours by an ounce of soda. He had never consulted a physician. At 7:00 a.m., Feb. 24, 1930, he noticed a fullness of the upper abdomen with a small amount of epigastric pain; this was relieved by soda. Four hours later, while working, he was seized with a sudden, severe, agonizing, knife-like epigastric pain with collapse. He remained in a fixed position as every movement greatly increased his pain. One-quarter grain of morphine did not relieve him nor did simple measures.

When he was admitted to the Grady Hospital his temperature was 100, his pulse 102, and respiration 24. There were 25,300 leukocytes, 90 per cent of which were polymorphonuclears. The entire abdomen presented boardlike rigidity and there was marked tenderness of the posterior cul-de-sac, which was more marked on the right. Urinalysis was negative. The patient looked desperately ill and begged for relief.

At 6 p.m. that day, I operated upon this man, with the diagnosis of ruptured duodenal ulcer while considering the possibility of a ruptured appendix. The ulcer was cauterized and sutured. A large amount of fluid was removed from the peritoneal cavity and drainage tubes were inserted at the site of perforation and through a stab wound in the right lower quadrant. The operation was done uneventfully under spinocain anesthesia, and the blood pressure was well sustained throughout. Convalescence was complicated by bronchopneumonia, but on March 25, 1930, the patient was dismissed from the hospital in good condition. He was advised to report to the medical clinic for further treatment.

Case 2. A fireman, aged 45, had suffered with indigestion at intervals for three years. The pain would come on about two hours after meals and could be relieved with food or alkali. At times he would be awakened by pain at midnight, which might be relieved by vomiting or by alkali; he was able to prevent this nocturnal pain by taking a glass of milk at bedtime. There was no history of vomiting blood or passing blood by bowel.

At 10 p.m., Jan. 1, 1930, he was awakened by a tight, full feeling of the upper left abdomen with a slight amount of pain. He got up and went downstairs after soda. He was seized with severe epigastric pain and collapsed. The pain gradually extended over the entire abdomen. He was unable to change his position because of increase in pain. The only relief he could obtain was in the knee-chest position. He was carried to the Grady Hospital and six hours after the onset of the pain, operation was performed under spinocain anesthesia. The duodenal ulcer was cauterized and sutured, and double drains were left in place.

January 3, lobar pneumonia developed and on the 12th erysipelas of the face and scalp set in. February

17, it was necessary to operate for intestinal obstruction. He finally left the hospital in good condition about three months after admission. He has since gained 40 pounds.

Case 3. On Feb. 12, 1930, a laborer, aged 44, whose history was essentially like that in Case 2, felt a cramping pain and fulness in epigastrium, more pronounced on the right, which gradually grew worse. The abdominal muscles became rigid and he was unable to straighten up. At 9 a.m. he took Pluto water and ate an apple; he did not take soda water. The pain continued to grow worse, and he took a drink of whiskey. A few minutes later he collapsed in the office of Dr. Nim J. Guthrie, who diagnosed a perforated ulcer and sent him at once to the Grady. Three and a half hours after onset, operation was performed as in preceding cases. Following an uneventful convalescence of a few weeks he left the hospital in good condition.

Case 4. A white man, aged 28, who had suffered from arthritis of the lower extremities and from indigestion, suffered a typical attack of agonizing epigastric pain on Oct. 3, 1929. He was given morphine and sent to Atlanta by automobile for an emergency operation. Operation was done eight hours after onset and he was able to leave the hospital in three weeks. This patient still requires soda from time to time, and the arthritis is unchanged.

Case 5. A white man, aged 26, who had enjoyed good health without any symptoms of indigestion, collapsed with sudden acute upper abdominal pain on March 10, 1926. Three hours after onset, I operated upon him at Davis-Fischer Sanatorium and found a ruptured gastric ulcer. He has had no symptoms since then.

Statistics

In the last eleven years in Grady Hospital, including both the white and colored divisions, there were 61 cases of ruptured ulcers, 30 gastric and 31 duodenal. There were 58 males and 3 females. From this series I have compiled the following statistics:

Cases not operated on:	
Total number	6
Deaths (necropsy in each)	6
Anesthetic:	
Ether	39
Gas-oxygen	10
Spinocain	5
Local	1
Operation:	
Cautery	12
Gastroenterostomy	9
Simple suture closure	31
Gastrostomy	1
Duodenoplasty	1
Drainage:	
Drains	42
No drains	13

The total death rate then was 40 per cent. Death occurred in 17 cases after operation. The post-operative death rate was 33 per cent. Of those operated on within the first six hours, however, the mortality was only 13 per cent. When operation was done later than this the mortality increased to 46 per cent.

Cause of Death

Hemorrhage	2
Peritonitis	12
Empyema	1
Surgical Shock	2
Embolism	1
Subphrenic Abscess	2
Cardiac Dilatation	1
Edema of Lungs	1

Of the 17 patients, who died following operation the duration of life was as follows:

1	0-1 hours
3	12-24 hours
1	24-48 hours
5	48-69 hours
7	96 hours or more

Conclusions

1. Within the first seven hours after rupture of a gastric or duodenal ulcer, temperature, pulse, blood pressure, blood count and urine are usually normal.

2. Clinically one of the characteristic signs of ruptured ulcer, different from other abdominal condition, is that the patient remains in a fixed position, as movement greatly increases pain.

3. In cases where I am unable to decide whether the condition is above or below the diaphragm, I believe a fluoroscopic examination and roentgenograms are indicated.

4. In the differential diagnosis one must consider ruptured gallbladder, ruptured appendix, acute pancreatitis, alcoholic gastritis, lead poisoning, cardiac disease, tabes, ruptured pus-tube, ruptured tubal pregnancy and pneumonia.

5. Do as little surgery as possible, cauterize, close, drain and get out.

6. Do no posterior gastro-jejunostomy or pyloroplasty in acute ruptured ulcers with a large amount of spilling.

7. After the operation place the patient on medical treatment and diet for two years.

8. Remove all foci of infection.

DIAGNOSIS AND TREATMENT OF THYROID DISEASES*

WARREN A. COLEMAN, M.D.

Eastman

The thyroid gland is fixed only at one point—its attachment at its isthmus to the trachea. Its lateral lobes are freely movable: so much so that when lifted from their beds by the fingers inserted behind them they may be almost completely inverted. In this position the two lateral lobes hang free as thick wings of thyroid tissue.

All thyroid diseases should be divided into two general classes—hyperthyroidism and hypothyroidism. It is not practical to classify goiters according to their pathology because the pathology is not evident until the gland is removed, either at operation or autopsy, and has been studied in the laboratory. I prefer a simple clinical classification which will be of benefit to us at the bedside rather than in the laboratory.

First, the adolescent goiter, sometimes referred to as the school-girl goiter. Second, the exophthalmic goiter. Third, the adenoma, which is subdivided into the simple and toxic adenoma. The malignancies may be classified under the adenomas, as 95 per cent of them originate in foetal adenomas.

The adolescent goiter is most often seen in young school girls between the ages of 12 and 17 and frequently produces no symptoms. It is uniformly enlarged, bilateral, regular in shape and outline. It is very likely a compensatory condition due to hypovarian function during the adolescent age. When the ovarian function is fully established the thyroid should return to normal without treatment. The symptoms which are often attributed to adolescent goiter are simply the symptoms of adolescence. At this age, which is a very trying age, a girl is undergoing the natural changes from childhood to young womanhood. This should be borne in mind and the patient treated accordingly. Many of these cases require no treatment, while others are decidedly over-

treated. I suggest iodine in some form in small doses to be given at irregular intervals, giving nature a chance to function without too much interference.

In exophthalmic goiter the gland may be only moderately enlarged, is uniform, bilateral, and regular in outline; usually there is a marked pulsation of the enlarged blood vessels of the gland. The patient is extremely nervous, shows a loss of flesh, appetite varies, there is insomnia, a marked tremor of the hands, sweating palms, tachycardia, and exophthalmos or protruding eyes, which gives this type of goiter its name. The course of an exophthalmic goiter is more or less irregular, the toxic symptoms varying from time to time like an intermittent fever chart, with an occasional increase or aggravation of all the usual symptoms, developing what is known as a thyroid crisis. During these crises the patient blows a fuse, so to speak, and irreparable damage is done. There may be several months or years between the crises.

Adenomas of the thyroid may be simple or toxic. They are always simple before they become toxic. Plummer states that at the Mayo Clinic 25 per cent of the adenomas admitted are toxic. He also states that the adenomas have been present in the thyroids for an average of sixteen years, before the toxic symptoms developed. In adenomas the outline of the gland is irregular, nodular, and probably larger on one side of the neck than on the other, sometimes feeling more or less like a bag of potatoes, and it is entirely different from the smooth and uniform appearance seen in the exophthalmic type. In simple adenomas there are no toxic symptoms, but these patients frequently give symptoms of pressure on the neck, esophagus, or the trachea and may produce a huskiness in the voice by pressure on the recurrent laryngeal nerves. If there be symptoms of thyrotoxicosis with adenomas it is not simple but toxic.

Auricular fibrillation or flutter may be the earliest detectable sign of thyrotoxicosis or toxic goiter. The goiter specialist early learns that all nervous symptoms, tremor, and tachycardias are not of thyroid origin.

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During sleep the tachycardia of a neurotic individual subsides, whereas when of thyroid origin it persists. These cases can always be correctly distinguished by means of the basal metabolism test. When properly performed in the correct basal state this test is pathognomonic of the presence or absence of thyroid over-activity. Place the patient in bed for several days and if the rate persists above normal the case is one of hyperthyroidism.

The treatment for exophthalmic goiter is surgical. Iodine is indicated as a preoperative measure in exophthalmic goiter, but should never be used except when preparing a patient for surgery, or in combating the crisis of the disease.

Treatment for simple adenoma is either to leave it alone or remove it surgically. There is no medical treatment for adenomas. In the toxic adenomas the symptoms are the same as in exophthalmic goiter, except there is no exophthalmos present; there is present tachycardia, nervousness, tremor, sweating palms, probably loss of weight, and all of the classical symptoms of thyrotoxicosis.

In toxic adenoma the symptoms develop more slowly and the basal metabolism rate is comparatively lower than in exophthalmic goiter. It is in this type of goiter, especially, that the basal metabolic reading often is not a true indication of the seriousness of the condition in the individual case, and we must depend more upon the clinical aspect of the case rather than upon the basal metabolic reading alone. There is only one treatment for adenoma of thyroid, that is surgical removal. This should be done before the appearance of toxic symptoms, if possible, inasmuch as at least 25 per cent ultimately become toxic. Malignancies of the thyroid are not uncommon and 95 per cent of these develop from adenomas.

Hypothyroidism may be congenital or acquired. The congenital type is well illustrated by cretinism. The acquired type is sometimes seen in women following natural or artificial menopause and is usually only moderately severe. These cases probably should be given both ovarian extract and

thyroid gland substance. Occasionally there occurs a postoperative hypothyroidism or myxedema.

Just as sure as quinine will cure malaria, iodides and salvarsan cure syphilis, sulphur cure itch, diphtheria antitoxin cure diphtheria, so will a maximal subtotal thyroidectomy cure toxic goiter. Toxic thyroids are now among the diseases which have been conquered by surgery. This is evidenced by the tremendous reduction in the operative mortality and the enormous increase in the number of individuals whose metabolic rate has been restored to normal and whose clinical symptoms have been made to disappear under the beneficent influence of the drug iodine, combined with the sharp edge of the aseptic scalpel. The most uniformly beneficial results obtained by means of the resection of all but a small portion of the thyroid tissue are in marked contrast to the indifferent or poor results formally observed with other measures, including less radical surgical attack.

This operation is one that should not be undertaken lightly or by anyone who is not thoroughly familiar with the details of aseptic surgery, and of the pathological anatomy of the thyroid gland. It involves a deep wound at the root of the neck in cellular tissue, which is exceedingly liable to septic infection. The dissection must be carried out in the midst of, and in close proximity to, various large and important structures, wound of any one of which may mean grave danger to the patient's life. The vessels which will be encountered are likely to be greatly dilated and their walls are easily torn. Serious hemorrhage, once started, may be very difficult to control. At every stage of the operation the operator should know exactly what he is doing, and be able to see precisely what he is about to cut. He should also remember, when operating upon large goiters, that the anatomical structures of the neck do not always occupy their normal positions, but are likely to be displaced and distorted by the goiter. Especially should he remember that the lower part of the goiter often extends down behind the clavicle or sternum into a region into which it is dan-

gerous to enter without a due knowledge of the conditions he may expect to meet. There are often special dangers connected with respiratory distress or cardiac failure which he must be prepared to avoid, or to deal with should they occur.

Position of patient: The shoulders should be well raised and the head thrown back as far as is consistent with comfortable breathing.

Skin Incision: A curved transverse incision low in the neck, the collar incision of Kocher. This gives much the best result from the cosmetic point of view, as the scar is low down and can easily be hidden by the dress or by a necklace.

Great care must be taken in the surgical management of the wound, for these patients do not withstand wound infections well. One can never afford, even though his experience in thyroid surgery becomes large, to be careless and rough in his operation upon the thyroid gland, nor can he disregard the importance of meticulous postoperative care.

When the patient returns to bed after operation she should be propped up at an angle of 45 degrees with pillows or a bed rest. In this position the patient is much more comfortable than when lying on the back. The position also favors drainage of colloid and blood-stained serum, a very important matter if primary union is to be obtained, as it should be. Following the operation, iodine should be always given in some form to prevent a postoperative thyroid crisis, which may be fatal, especially following an operation for exophthalmic goiter. Iodine given at this time stabilizes the gland activities and acts as a splint as in the case of morphine to the fractured skull. I give the patient morphine grains one-fourth every four hours, if necessary, to keep quiet, liquid nourishment for three days, then soft diet. Out of bed on third day. Remove drainage at end of forty-eight hours and dress daily for four days, then every other day for three or four times. If there is no infection they can take care of the dressing if a dressing is to be desired.

CHRONIC KIDNEY DISEASE*

With Special Consideration of Nephrosis

HAROLD C. ATKINSON, M.D.
Macon

I did not decide upon this study of Bright's disease because I have any new or startling discoveries or theories to report, nor because I consider myself an authority on this subject. I have undertaken it because I felt that, in this field in which there has been such chaos in classification and so much confusion and vagueness in concept and use of terms, such a study would be of great benefit to myself and probably not uninteresting to this gathering.

In undertaking this survey of the field of chronic kidney disease we shall first consider individually the symptoms which are indicative of inflamed or diseased kidneys.

A. Urinary Symptoms Directly Referable to the Kidney

1. Hematuria: The blood may be from any portion of the genito-urinary tract, but when the hematuria is due to nephritis it is indicative of an acute inflammatory process involving the glomerulus. This acute process may of course represent an acute exacerbation in a chronic condition.

2. Albuminuria: Albuminuria occurs in all forms of nephritis and also in other conditions, but the mechanism is probably not always the same.

(a) So-called "orthostatic albuminuria" occurring in lordotic individuals who are otherwise normal and free from kidney disease is thought to be due to venous congestion of the kidneys secondary to the lordosis.

(b) The usual albuminuria of nephritis is due to inflammation and damage to the glomeruli. The albumin is thought to be partly an exudative reaction to the inflammation as in other parts of the body, and partly due to the fact that the damaged glomerular filter allows albumin to pass, whereas the normal filter would be impermeable to it.

(c) In nephrosis we have the most ex-

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treme albuminuria with little evidence of inflammatory damage to the kidney. The most plausible explanation for this albuminuria seems to be that given by Rolph Floyd. This explanation is on the basis of a kidney threshold for albumin just as for sugar, salt, and urea. Those substances for which the renal threshold is below the concentration in the blood are normally found in the urine. Albumin is considered as having, like sugar, a threshold normally above the concentration in the blood. The threshold points for salt and for sugar have been shown to be mobile in health and in disease. Albuminuria can therefore be explained on a threshold basis, not only by an increase in concentration of albumin in the blood, but also by an abnormal lowering of the kidney threshold for albumin. This allows the passage of the blood albumin in large quantities in the urine, resulting in a marked lowering of the serum content of albumin.

(d) A fourth explanation of albuminuria, sometimes applicable, considers it as a protective reaction on the part of the kidney, secondary to metabolic disturbance elsewhere in the body. If proteins are not normally metabolized, the abnormal by-products, including albumin, are handled by the kidney as foreign substances and eliminated in the urine.

3. Urinary Casts: All casts are basically albuminous and their presence in the urine has in general the same significance as albuminuria. Blood casts have the same significance as hematuria. Cellular casts represent destruction of the renal tubules. Granular casts are rather more abundant in those conditions where the inflammatory element is more marked, that is, in a true nephritis.

4. Change in Quantity of Urinary Output: Water is probably the most important substance excreted by the kidneys, not because its retention is damaging to the body, but because the excretion of all other substances depends upon water excretion.

Any marked diminution in the amount of urine excreted seems to be attributable to a failure of free access of blood serum to the glomerular filter. This may be due to (1) inflammation of the glomeruli themselves; (2) to extensive swelling of the tubu-

lar epithelium, causing increased intra-renal pressure as in bichloride of mercury poisoning; (3) reflex contraction of the small arteries of the kidney resulting from ureteral calculus; (4) anhydremia, as in high intestinal obstruction.

The kidneys are usually very sensitive to any increase of water in the blood. In a normal individual the urinary output can be increased forty times its usual volume without producing hydraemia. This constitutes a compensatory margin of safety which is used to advantage when the concentrating power of the kidney fails. When not so compensatory, an abnormal increase in urinary output due to kidney disease is thought to indicate a failure of water resorption in the tubules. This occurs when the number of tubules is reduced. Since tubular reduction is usually secondary to glomerular reduction, this is a late result of glomerular nephritis.

B. Symptoms Indirectly Related to Diseased Kidneys

1. Edema: The pathogenesis of dropsy has not been entirely and satisfactorily solved. This like albuminuria probably has no single explanation. It may be said in the first place that it is almost never due simply to an inability of the kidneys to excrete water. The fault is nearly always at the point of water exchange between the tissues and the blood. There is usually some damage or alteration to the capillary walls which deranges their function and increases their permeability. This may result from such causes as defective blood supply, various toxins, excessive sodium chloride, etc. In certain renal cases an excess of sodium chloride can be demonstrated as having the leading role, with an excess of water as a contributory factor. In these cases, a limitation of these two substances results in marked improvement.

In nephrosis the edema is most probably secondary to the extensive loss of serum albumin in the urine. This loss of blood protein causes a drop in the osmotic pressure of the blood plasma, and outflow of fluid from the vessels into the tissues results. In recent experiments Barker and Kirk produced a low protein blood content by repeatedly with-

drawing blood from animals and returning the cells in physiologic salt solution. Edema, together with other characteristics of nephrosis, developed in these animals.

2. Hypertension: We cannot enter into a discussion of this symptom as one of the manifestations of smooth muscle spasm in that very interesting condition of spasmodic aptitude of Houston. We must limit our attention to the renal relationships.

Hypertension constitutes the main link that binds heart failure to kidney failure in cardio-renal disease. Floyd states that in seventy-five years of study only one change in structure besides cardiac hypertrophy has been shown to bear a definite relation to hypertension, and that is sclerosis of the smaller renal arteries. The smaller the branches affected, the more likely and higher the hypertension. Sclerosis localized elsewhere has not been shown to bear any such constant relation to hypertension.

Inflammatory changes in the renal tissue may or may not be associated with the arteriosclerosis in the kidney. If they are not, there are no urinary symptoms and we have "essential hypertension". If they are, we have a chronic nephritis with hypertension.

The hypertension of acute nephritis must be explained on a different basis. Volhard and Fahr believe that it results from the glomerular lesions.

Any relationship between hypertension and salt retention remains unexplained. Allen and others report marked lowering of hypertension from salt restriction. Other workers have failed to demonstrate any such benefit.

3. Convulsions: Convulsions in nephritis usually occur in the so-called false type of uraemia; that is, independently of nitrogen retention. They are attributed to edema of the brain, due either to salt retention or to a suddenly increased blood pressure. They are therefore relieved by spinal puncture and blood-letting and benefited by salt and water limitation.

4. Eye-Ground Changes: The so-called "albuminuric retinitis" of some diagnostic and great prognostic importance in renal disease is considered by recent authorities as resulting only indirectly from the nephritis,

being more directly of circulatory origin. A combination of diseased retinal vessels and spasm occurring from sustained hypertension causes the condition.

Volumes might well be and in fact have been written on the question of classification of kidney disease. Here we can only sketch the problem. A hundred years ago Bright demonstrated that some relation existed between renal symptoms and renal lesions. To better understand such relationships has been the object of subsequent study. Prior to 1900 the pathologic study predominated. Purely on a pathologic basis nephritis was divided into interstitial and parenchymatous types. Even from a pathologic standpoint this classification is unsatisfactory. It leaves out of consideration the glomerulus, one of the most important of the kidney elements. It has been found that in using this grouping, over half the cases brought to autopsy do not show the expected lesions. These terms have been pronounced unsatisfactory, but their abandonment is naturally slow.

A reaction against this classification led to a clinical grouping of kidney disease, with no consideration of the underlying pathology. French workers especially and a number of clinicians in this country adopted the apparently simple descriptive divisions of (1) nephritis with edema and (2) nephritis with hypertension. This classification may be convenient, but it is certainly dodging the issue, and we cannot afford to discard entirely what knowledge of renal pathology has been contributed by a century of work.

Since the excellent work of Volhard and Fahr was published in 1914, their classification has gained steadily in favor. It has its imperfections, but it represents an attempt to correlate the clinical and the pathological since it is based in as far as possible on pathogenesis. There are three chief divisions in their grouping: (1) The true nephritis—or glomerulo-nephrosis—inflammatory in character and involving primarily the glomerulus. (2) The nephritis group in which degeneration predominates instead of true inflammation, particularly tubular degeneration. (3) The nephroscleroses—in which the smaller arteries and arterioles are

primarily affected, either with or without renal inflammation.

An unsolved problem is what term is best applied to this entire group of conditions we are discussing. Kidney disease is rather too broad in its scope. Nephritis means inflammation of the kidney and is therefore, inappropriate for the last two groups. Bright's disease has lost its original meaning, and may be said to be rather indefinite in its present significance, but is probably preferable to either of the others.

Nephrosis:—Volhard's nephrotic group includes four subgroupings: (1) Bichloride nephrosis; (2) The nephrosis of amyloid disease or the amyloid kidney; (3) The nephrosis of pregnancy or the kidney of pregnancy; and (4) Lipoid nephrosis.

As usually used the term nephrosis applies to this last group, the other conditions being designated by their more individually distinctive terms. In this country Epstein has been foremost in the study of nephrosis and the condition is sometimes referred to as Epstein's nephrosis. Cases belonging to this group have extensive edema and anasarca. Their pronounced pallor is out of proportion to their anemia. The urine is of low volume and high specific gravity. It contains a very large amount of albumin and both hyaline and granular casts, but red cells are characteristically absent. Doubly refractive lipoid bodies are frequently found in the urinary sediment corresponding to those which may be demonstrated in the cells of the kidney tubules in this condition.

The blood changes in nephrosis are of primary importance. There is a marked decrease in blood protein. The loss is in albumin entirely, the globulin being somewhat increased. This causes an inversion of the normal albumin-globulin ratio. There is normally twice as much albumin as globulin in the blood plasma, but in this condition there is only from one-half to one-seventh as much albumin as globulin. A second important change in the blood is the marked increase of fat present. As measured by cholesterol content, this increases from a normal of 200 mg. per 100 cc. to from 300 to 1,000 mg. In the uncomplicated

cases there is no rise in the non-protein nitrogen of the blood.

One of the most interesting characteristics of nephrosis is the lowering of the basal metabolic rate. This is not thought to be due to an actual thyroid deficiency but to what might be called a relative deficiency. In the presence of a diminished sensitivity of the body cells to the stimulative effect of thyroid, a larger amount of the extract is needed to maintain a normal metabolic rate.

There is little agreement as to the etiology of nephrosis. Association with syphilis at first thought causal is now considered as rather coincidental when it occurs. Cases have seemed to occur rather more frequently following pregnancy than otherwise. The frequency of association with pneumococcal infection has been noted, but no definite etiologic relationship has been established. Epstein considers that the disease is primarily a metabolic rather than a renal disorder, but he has not been able to explain its pathogenesis.

He has, however, made a definite contribution as to treatment. In contrast to a true nephritis where a limitation of protein is helpful these cases need a high protein diet to replace the loss of blood protein. In view of the lipoidemia a low fat diet is indicated. The administration of thyroid extract aids in the reestablishing of normal metabolism and the utilization of the protein.

The occurrence of pure nephrosis is rare as this condition is usually complicated later, if not in its early stages, by an associated glomerular nephritis. This necessarily influences and complicates the therapeutics, but in such cases it is just as important to recognize the nephrotic element as it is the nephritic element.

Conclusion

I. Renal Symptoms: Many advances have been made in their interpretation, but until the problem of normal renal function is more fully solved, we can understand the abnormal only in part.

II. Classification: Since the same morbid process produces the symptoms and the lesions of kidney disease, pathogenesis must be the basis of any satisfactory classification. Since our knowledge is imperfect, so are our

classifications, but at the present time division into nephritis, nephrosis, and nephrosclerosis seems preferable to interstitial and parenchymatous groupings.

III. Nephrosis: An interesting and not thoroughly understood condition, occurring rarely in pure form, but not infrequently predominating in the earlier stages of chronic kidney disease. It deserves recognition and appropriate treatment.

SYPHILIS*

The Importance of Early Diagnosis and Adequate Treatment

W. A. UPCHURCH, M. D.
Atlanta

With the discovery of the spirocheta pallida as the causative agent of syphilis, by Schaudinn and Hoffman; the Wasserman seriological reaction by Wasserman; and salvarsan and neosalvarsan by Ehrlich, it was hoped that the incidence of new cases of syphilis could be markedly reduced by means of rapid sterilization, if not a cure of patients with infectious early syphilis. This expectation has not been realized to the extent of our original hopes. This means that the chief methods with which the medical profession have to combat the disease have not been utilized to their fullest extent.

It is the duty of every physician to endeavor to enlighten his patients regarding the social disease evil. I will not attempt to tell you how this should be done, but suffice it to say that we should fearlessly approach the subject and never lose an opportunity to give lectures to high school boys and girls, school teachers, parent-teacher associations, club meetings, etc., so that the public may be informed of these social diseases, and there is no real reason why they should not be kept informed of these social evils, just as much as they are of tuberculosis and cancer. By breaking down the barriers that we have been facing, namely, ignorance of the public on sex questions, we hope that the people will be more careful in their sex relations;

secure prophylaxis when exposed; and, if infected, seek the advice of a legitimate experienced physician, instead of the quack, the drug clerk, or the prescription of a friend.

The experience of the U. S. Army demonstrated that correct prophylaxis given within four hours after exposure will markedly reduce the incidence of venereal infection, and we should bear in mind that every sexual exposure is a potential source of venereal disease. Without going into detail of the method of prophylaxis, suffice it to say that plenty of soap and water is a protection against chancroid; argyrol in 10 per cent solution, as an injection, protects against gonorrhea; calomel ointment 33 per cent applied locally is a protection against syphilis.

Methods of Making a Correct Diagnosis

First, an accurate history is very essential, and a complete physical examination, as well as to make a careful inquiry of all contacts with the patient and, if possible, examine all such cases thoroughly to discover if they too are not syphilitic. If the case is one of a primary lesion (and all genital sores should be so considered until correctly diagnosed) a dark field examination should be made of the serum from the sore. If you have no dark field, and there is not one available in your community, the india ink method of staining, or staining with Geimsa's blood stain, are fairly reliable, but it will be much better to refer the case for diagnosis to someone who is better equipped to make a scientific diagnosis for you. A Wasserman test should be made, but remember that the Wasserman is often negative in primary syphilis until after two to six weeks have elapsed.

Do not treat the sore with any kind of medication, and especially caustics, until after several studies are made with the dark field; remembering, that the very small and simple sore may be a chancre; and, that a typical chancroid may be a mixed infection; that is, a chancroid complicated with chancre; and, most of all, remember that a correct diagnosis cannot be made by looking at the sore or even feeling of it.

The Wasserman test should be a routine examination of all patients, but I realize that this is practically impossible; however, when you consider that 25 per cent of all the Was-

*Read before the Chattahoochee Valley Medical and Surgical Association, Albany, Ga., July 8, 9, 1930.

sermans done by the Georgia State Board of Health are positive, it is evidence of the necessity of doing this test routinely; but, if it is not done as routine, it should at least be made on all pregnant women; all leg ulcers; all cardiovascular diseases; wounds which refuse to heal, and all chronic conditions which fail to respond to the usual therapeutic measures. If a positive report is obtained where there is a negative history, and the physical signs do not warrant such a report, always repeat the Wasserman before instituting treatment; remembering that no laboratory is absolutely infallible, and there is always a possibility of an error. But if your second test is positive it means that the patient has syphilis if you can rule out a few of the tropical diseases such as yaws, relapsing fever, and leprosy. A diet of sweet milk and cream over a long period of time will sometimes produce a positive Wasserman.

If a negative report is obtained, and there is the slightest suspicious physical findings, repeat the test several times, bearing in mind that the value of a negative Wasserman is exactly "nothing", and that 25 per cent to 50 per cent of the patients with latent syphilis and syphilis of the central nervous system have negative blood Wassermans. Someone has well said, "Learn to use the blood Wasserman test as only one element of diagnosis of syphilis, and when it is negative, don't dismiss syphilis as a diagnostic possibility."

After a thorough examination and a positive diagnosis, it is always better to explain in detail the possible amount of treatment necessary for the average case and the approximate cost of this amount of treatment. Try to obtain the full confidence of your patient, make him feel and know that you are giving him the best that money can buy, and the best that the medical profession can offer to rid him of this dreaded disease.

Treatment of the Chancre

These lesions need no local treatment except cleanliness, if they are not complicated with a mixed infection. If the patient insists on some kind of local treatment, there is nothing better than cleansing with warm water and keep the sore dry with powdered

calomel. These lesions heal rapidly with arsphenamine intravenously.

Treatment of Primary Syphilis

It is essential to adopt some routine plan of treatment for all primary cases, provided the plan calls for an adequate course of each of the syphilitic specifics; for the reason that clinical evidence has shown that radical cure serologically and physically is possible in early syphilis, but there is a doubtful prognosis after the infection has become firmly entrenched in the tissues.

Stokes, in a recent article, advocated not less than 40 doses of arsphenamine, together with a like amount of bismuth and mercury; and at least one full year's treatment after the Wasserman reaction is negative; there being no rest period during the course of treatment. He also advocates a full course of treatment during every pregnancy of a mother who has previously been syphilitic, even though she is Wasserman negative.

Our rule is to give 12 doses of arsphenamine, 20 doses of bismuth, and 10 doses of mercury, divided approximately as follows:

1. Three-tenths grams of arsphenamine intravenously once a week for eight doses successively.
2. Mercury salicylate grains, one, intramuscularly once a week for ten doses.
3. Bismuth salicylate grains, two, intramuscularly once a week for ten doses.
4. Arsphenamine, three-tenths grams, intravenously once a week for four doses.
5. Bismuth salicylate grains, two, intramuscularly once a week for ten doses.

In late or visceral syphilis, extreme individualization of treatment should always be adopted, and here it is impossible to carry out any routine plan of treatment.

Arsphenamine Versus Neo-Arsphenamine

Arsphenamine is without a doubt the most efficacious of the arsenicals, but its alkalization before administration makes it more difficult for the average practitioner. Either excessive or insufficient alkalization is productive of reaction, and for this reason "only" should one use the neo-arsphenamine in preference to arsphenamine. Experiments have shown that neo-arsphenamine is less stable and less potent; contains approximately 15 per cent arsenic as compared with 30

per cent in arsphenamine; and, therefore, it is of far less therapeutic value; but, if neo-arsphenamine is used in preference, one should bear in mind its therapeutic value and make up this difference by larger doses, and a longer course of treatment. There are, however, certain cases where neo-arsphenamine is preferable; for instance, where there are very poor veins in the very young or very old; and, in small doses in cardiovascular syphilis where it is advisable to give arsenic.

In preparing arsphenamine for administration, we make our solution in proportion of three-tenths grams of arsphenamine to 50 c. c. of plain sterile freshly distilled water. Shake the mixture as little as possible and add the 15 per cent sodium hydroxide by the drop method, keeping accurate count of the number of drops necessary to clarify the solution, then add an additional 25 per cent of the sodium hydroxide solution to render the finished product distinctly alkaline, and allow the mixture to stand 30 minutes before injection.

When the drug is first dissolved it is acid in reaction and in this solution it is very dangerous. After the addition of the sodium hydroxide solution to the point of clarification it is a *mono-sodium salt*, and the administration in this condition is productive of severe reactions; but, after the addition of the 25 per cent additional sodium hydroxide, it is a *di-sodium salt*, and is very much less toxic than the mono-sodium salt. The failure to properly alkalinize is responsible for more reactions than any other error connected with arsphenamine administrations.

Whether using arsphenamine or neo-arsphenamine the initial dose should be one-half of future doses, so as to prevent a Herxheimer reaction, and then regular doses should be given at least every five to seven days. The entire treatment should be an active and intensive one instead of a passive one.

Bismuth and Mercury

On account of the time allotted for this paper, I will only say that the insoluble salts of bismuth and mercury given intramuscularly in the upper and outer quadrant of the gluteal muscles is considered the best way of administration of these drugs, and bismuth is considered superior to mercury.

Continuous Versus Intermittent Treatment

A statistical report of the United States Public Health service is as follows: "Continuous treatment with alternating courses of two drugs including at least two courses of arsphenamine, only 2.6 per cent developed clinical recurrences, and 3.1 per cent blood Wasserman recurrences, while in patients receiving the same amount of treatment, given intermittently with a period of rest between treatments, developed clinical recurrences in 11.8 per cent and blood Wasserman recurrences in 32 per cent.

Regardless of how you arrange your alternations of the different drugs enumerated, a case of primary syphilis should receive treatment of not less than one year without any intermittent rest period. The probability of ultimate cure is in direct proportion to the duration and regularity of treatment.

The only definite evidence of a complete cure of syphilis is a reinfection. However, prolonged clinical observation plus a negative Wasserman reaction for a period of two years after the last treatment is fairly accurate evidence of a cure. It is a wise rule to follow this with a spinal fluid test; however, I do not always insist upon this. Patients who have responded well clinically and serologically to regular treatment, the omission of the examination of the spinal fluid test may not be of very vital importance.

Summary

1. Early diagnosis of primary lesions is of paramount importance.
2. Systematic treatment over a period of time sufficiently long, and without intermission should be carried out.
3. Arsphenamine is far superior to neo-arsphenamine.
4. Arsphenamine improperly alkalized is the cause of a majority of arsphenamine reactions.
5. Have Wasserman tests made regularly for at least two years.
6. If the facilities are not available to give arsphenamine, give twice as many doses of neo-arsphenamine.
7. Do not rely on a negative Wasserman; it may be positive next month.
8. Endeavor in every way possible to promote an educational program in social disease.

POST OPERATIVE PULMONARY EMBOLISM

J. D. MARTIN, JR., M.D.
Atlanta

In view of the rapid increasing number of fatal pulmonary emboli, I am endeavoring to investigate the underlying causative factors and the prevention of them. The relative increase in the condition is shown by the statistics of Oberndorfer (1), during a period of three years consecutively, from 1912 to 1914, was 3 per cent of deaths from post operative embolism out of 1,200 post mortem examinations. From 1925 to 1927 inclusive there was 5 per cent of deaths from post operative embolism in 2,500 post mortem examinations. According to recent statistics compiled by Norris (4) in this country post operative embolism ranks second as a post operative cause of death with the percentage of 12. At the Mayo Clinic 9 per cent of all deaths post operatively are attributed to pulmonary emboli.

According to Boyd (2) in the production of thrombi, either of three factors must occur, namely, an alteration in the blood stream itself, deficiency of the cardiac action or an alteration of the endothelium of the blood vessels. They may occur separately or in combination. Disturbances of the blood vessel lining take place at the time of operation by undue traumatization of the blood vessels, particularly the larger veins of the pelvis, causing a sufficient injury to leave these vessels thrombosed. During this period of frequent venipuncture and promiscuous and unguarded intravenous medication many authors have been lead to consider this a factor in the ever-increasing incidence of pulmonary embolism.

Two main theories of the formation of emboli have been exploited; the one basing their claim on a stagnation of the venous blood, especially those veins of the lower extremities which have a natural predisposition to thrombus formation, while the basis for argument of the latter school is centered on the infectious principle. Recent experiments conducted at Yale Medical School bring this out. At the site of operation the terminal lymphatics become inflamed and spread up

the iliacs and from there the thrombophlebitis of the femoral vein takes place retrograde. Stagnation of the blood in the femoral vein with the predisposition for thrombus formations as the cause of this condition seems to have gained the greatest following. According to Maxim of Virchow, obesity plus a predisposition to thrombus formation are factors in the formation of emboli. Even this may be understood on the vagotonic theory. Obesity is considered of so much importance by Walters of the Mayo Clinic that he gives desiccated thyroid preoperatively.

Post mortem examinations have shown that the majority of pulmonary emboli have their origin from the veins of the lower extremities (6), in that the emboli exhibits definite ribbing and also the molds formed from the valves of these veins. After lodgment of these fatal emboli, death takes place either immediately or in a few hours, occurring as an asphyxiation or sudden lowering of the blood pressure in the greater circulation. The pathology is that of an occlusion of the pulmonary artery, most frequently the right, with a consequent edema of the lung without hemorrhagic consolidation.

Nothing has been found to be of value in treating this most dramatic post operative complication. Some have attempted the Trendelenberg operation (5) which consists of trephining the sternum and opening the pulmonary artery and removing the embolus. This procedure has been successful in the hands of a very few. Besides the danger of the operation, the failure to remove the underlying basis for the formation of the thrombus may be the reason no better results are obtained. The therapy then evolves around that of prophylaxis. More careful selection of all patients for operation and a more complete preparation of those showing general systemic diseases such as tuberculosis, pernicious anemia, cardio-vascular renal disease and diabetes is necessary (3). In hypotensive individuals a stimulating regimen of treatment is of benefit. Anesthesia and the care of the patient during the anesthetic should require considerable thought. The use of local anesthesia is preferable and safest in the majority of instances. No constriction should be allowed on the limbs and the usage of high

stirrups during vaginal operations should be of as short duration as possible.

It is necessary only to remember a few sometimes overlooked precautions during the actual operation itself: First, avoiding traumatization of blood vessels and long retraction and pulling on the abdominal wall, and, last but not least, perfect hemostasis.

Pelvic and femoral stasis can be prevented post operative by allowing those patients who require Fowler's position to remain in such only a short time. Early active motion of the entire body and especially the extremities immediately after the operation is an important factor in helping to maintain the vaso motor tone and complete emptying of the veins of the lower extremities. Passive motion, particularly of the lower extremities, is condemned on account of the breaking away of thrombi that might be present in the femoral vein.

Pre-operative and post-operative intravenous therapy should be looked upon with scorn by both surgeon and internist alike. Little do we know of the actual chemistry of the medicaments after they have been liberated in the tissues themselves. It is known, however, that certain chemicals have a sclerosing effect on the lumen of the blood vessel and it is reasonable to suppose that a damaged intima might predispose to thrombi. Since most clinics are advocating the use of conservatism in gynecological cases, especially those of acute pelvic inflammatory infection, it is hardly necessary to emphasize the necessity for extreme care in these acute inflammatory conditions.

Summary

1. There is an increasing number of post operative pulmonary emboli to the extent of becoming an important consideration in all operations.

2. Three factors predispose to the formation of thrombi, namely, alteration in the blood, blood vessels and the flow of the blood stream.

3. The usual sight of origin of emboli is from the femoral vein regardless of the complete absence of the evidence of such formation before the accident occurs.

4. The treatment is essentially that of prophylaxis and conservatism.

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THE ASSOCIATION OF THROAT INFECTION AND ABDOMINAL PAIN*

W. L. WILKINSON, M.D.
Bainbridge

Brennerman has probably written more about the association of throat infection and abdominal pain than any other man in America. He and Glodblom agree that pain in the abdomen in acute throat infection is usually of two types. The first is intermittent and paroxysmal occurring at the onset of the disease. It may be the most prominent symptom. This type is not commonly associated with tenderness and practically never with rigidity. It is usually felt about the umbilicus and disappears early, usually long before the throat infection has cleared appreciably. The second type of pain is not so sudden in onset. It may appear after the throat and upper air passage have improved. It may be felt anywhere in the abdomen, but more often to the right of the umbilicus. It is apt to be progressive in character and is associated usually with tenderness. I believe, with others, that this type is probably appendicitis to begin with. We know that carious teeth and pyorrhoea are associated with disease of the gallbladder, peptic ulcer, and even appendicitis in adults. We know that parenteral infections of the infant, such as dysentery and peritonitis, occur fairly frequently during respiratory infections and also that pyelitis is often the sequella of tonsillitis. Why then is the throat as a focal point of infection causing appendicitis impossible?

Evans, at the University of Wisconsin, in his study of 236 cases of acute appendicitis occurring in 16,000 students, has shown that this disease is about eight times as fre-

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quent during and following infections of the upper respiratory tract. Brennerman reviewed the histories of thirty-five cases of appendicitis operated upon at the Children's Memorial Hospital and found that 17 per cent occurred during unquestioned throat infections and that an equal number were suggestive. In our own institution we have noticed for a number of years that there is apt to be an epidemic of appendicitis following influenza epidemics.

Shall we dismiss belly-pain because of co-existent throat infection? Absolutely not. I think, however, we may reasonably wait a few hours until a careful physical examination has been made, and until the nervous influences of a high temperature and, as far as possible, the toxemia has been relieved. The baby often presents an entirely different picture. For example, a child four years old was brought into the hospital last October for immediate operation because of appendicitis. The child had been taken suddenly ill that day with a high temperature and severe abdominal pains. Examination revealed a red granular acutely inflamed tonsils. The abdomen was tense and tender and showed considerable rigidity. The rigidity was definitely more pronounced along the lower right rectus muscle. Instead of immediate operation the throat was swabbed, 2½ grains of aspirin given, and the child was kept under observation. The next day this little fellow's abdominal symptoms had vanished. I believe that every case occurring early, with a sudden onset, should be treated conservatively.

So much for the types as classified by Brennerman and Glodbloom. There is, in my opinion, another abdominal pain that occurs as a symptom of chronic or sub-acute throat infections. This child is usually of the pronounced adenoid type, a mouth breather, and a very restless sleeper. From time to time he has periods of more or less intense acidosis with vomiting. His pain is located in epigastrium and extends along the liver margin. The liver may or may not be slightly enlarged, but there is usually a definite tenderness along the margin of this organ. According to the history given by the

mother he is "bilious" and she gives calomel frequently. Practically all these children have diseased throats and I plead for a routine inspection and treatment of the throat whether the patient is febrile or afebrile or whether there is any evidence of catarrhal or bronchial infection or not.

Conclusions

(1) We believe there is a benign abdominal pain associated with acute throat infections occurring early and usually disappearing early; that it is probably reflex in origin and does not indicate abdominal pathology.

(2) There is abdominal pain usually late in throat infections or following them that is due to an acute appendicitis.

(3) Children who frequently suffer from vomiting and acidosis should have routine throat inspection and persistent treatment until their adenoids and tonsils can be removed. This should be done whether the child has fever or not or whether he has any external evidence of cold.

PRINCIPLES TO BE APPLIED IN DISEASE PREVENTION*

J. D. APPLEWHITE, M. D.

Macon

In the early days of public health work most of the activities of those carrying on the programs were directed to environmental sanitation for at that time the causes of disease were believed to be odors, gases and emanations from decaying animal and vegetable matter. The disease malaria which is receiving so much discussion today gets its name from this old belief. The word malaria means bad air. In our work at the present time we see ample evidence of the teachings of our predecessors. It is not infrequent that we see both white and colored people wearing materials about their necks which give off a bad odor, for the purpose of keeping off various and sundry diseases. The apparent idea is that if a material with a sufficiently bad odor can be used it will overcome those odors which supposedly cause disease. In public health work of today it is

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our duty to overcome these beliefs and tell the public the facts that we now know in regard to the cause of disease, the source from which the infection agents come, and measures that can be applied for their prevention.

Within comparatively recent years we have learned that the principal source of infection of the communicable diseases is man himself and this is one of the most important advances that have been made in preventive medicine. There are of course, a few diseases transmitted to man from lower animals but these can be controlled by intelligent measures directed against the offending animal. The task of preventive medicine is rendered much more difficult by the fact that the control of most infections depend upon the control of man himself, and effective control measures cannot be applied unless people will obey certain simple sanitary laws.

The commonest of the communicable diseases are those affecting the respiratory tract and include tuberculosis, diphtheria, scarlet fever, common colds, and a host of others. The control of all these diseases depends, from a viewpoint of sanitation, upon the proper care of the secretions from the mouth and nose of all people with these diseases. We know and have known for a long time that these diseases are transmitted from one person to another by a transfer of saliva from one mouth to another, and too, the material transferred must be fresh, for pathologic bacteria ordinarily do not live long when they leave their natural environment, namely the body of man.

When we consider how prevalent some diseases are, we get an idea as to how common is this swapping of saliva. We but have to observe our fellow man, or even ourselves to see how it is possible for transfer of infective material from one to another. The principles to be applied for the prevention of this group of diseases are so simple that they are elemental, but it is important that we continue to emphasize them. As we observe our associates we notice that a cough or sneeze is seldom covered, and the spray which is thrown into the air is breathed in by all who happen to be near. In many places we still see the common drinking cup in use. If one expectorated into a container of water that is to be used for drinking purposes, condem-

nation would be brought upon him by all who witnessed the act. What is the difference, except in the amount of saliva concerned, in drinking from a cup or dipper and then placing it back into the container?

Perhaps the chief vehicle for the conveyance of nasal and oral secretions from one to another is the fingers. Not only is saliva made use of for a great variety of purposes and numberless articles are for one reason or another placed in the mouth, but for no reason whatever and all unconsciously, the fingers are with a great frequency raised to the lips or nose. All successful commerce is reciprocal and in this universal trade in human saliva the fingers not only bring foreign secretions to the mouth of their owner, but there exchanging them for his own, distribute the latter to everything the hands touch. The cook spreads his saliva to the food, the waitress infects the glasses and spoons, the moistened fingers of the peddler arranges his fruit. Everyone is busily engaged in this distribution of saliva so that the end of the day finds this secretion freely distributed on almost everything with which the hand of man comes in contact.

The principles of sanitation to be considered in the control of these diseases are, the covering of each cough and sneeze, caution as to where one expectorates, keeping unnecessary articles out of one's mouth. These measures are simple, and perhaps it is unfortunate that the measures are simple, as it makes it difficult for us to get them applied by the general population.

What is true of the transfer of mouth and nose secretions is true to a certain extent of the intestinal and kidney secretions. When one considers the prevalence of typhoid fever, the dysenteries and hookworm infestation it is apparent that there is a frequent transfer of these discharges from the body of one person to another.

If we only observe, as we pass along the highways in the rural as well as urban centers, the open surface toilets, with their contents exposed to flies, domestic animals, fowls and subject to being washed over the surface of the ground with rain there is no wonder that these diseases continue to prevail. The remedy for the control of these diseases is again so simple that it is difficult to have it applied.

We should however, continue to insist that all this waste be properly protected so that it cannot be transferred to other people. If we continue to inform the public that the only way they get typhoid fever or dysentery is by swallowing the excreta of another person, and not spend too much time having water supplies tested, we will begin to make progress in the control of this important group of diseases.

We have some diseases transmitted by insects, one of which, malaria, is receiving discussion today. We should of course use every means at our disposal to control the insect responsible for the transmission of disease, but let us consider at the same time that the insect ordinarily is not to blame, as they usually become infected by biting a person who has the disease. The insect transmits or gets the infected material by coming in contact with something left exposed by people. In the control of this group of diseases it is important that people take the precaution to protect themselves against insects, as well as to dispose of all infected material, both active and potential, in such a way that insects cannot come in contact with it.

For some diseases we have available specific preventive agents. The education of the public to the general use of these specific preventive agents for their protection is one of the most important duties of our profession. The application of measures for the prevention of infant death, such as the education of expectant mothers as to the proper care during their pregnancy, proper feeding and care of the baby after it has been born constitutes one of the most important activities of organized public health work. In all of this work the principles to be applied are simple and can be used by all the people, and I believe will be eventually adopted if we continue our efforts to inform the public of the benefits that will accrue by their application.

That results will be accomplished in a community where efforts are made to prevent disease can be illustrated by the following statistics in Macon for the past several years:

The tuberculosis death rate has been reduced from 152 per hundred thousand in 1923 to ninety in 1929. Deaths from typhoid have been reduced from 36 per hundred thousand in 1925 to 7 in 1929. Deaths

from diarrhoea and enteritis under 2 years of age have been reduced from 37 in 1926 to 6 in 1929. The infant mortality rate has been reduced from 156 in 1923 to 69 in 1929, and the general death rate from 16.9 per thousand in 1923 to 14 in 1929.

What can be accomplished in one community can be done in others. The need at the present time is for organized public health work to be established in every community in the state, so as to give all our people the benefit of information which has been available to us for a number of years. In the promotion of this work the medical profession has taken the lead and is still working to the utmost of their ability to encourage the application of principles for the prevention of disease.

ROENTGEN DIAGNOSIS OF ASCARIASIS

Vincent W. Archer, University, Va., and Charles H. Peterson, Roanoke, Va. (*Journal A. M. A.*, Dec. 13, 1930), assert that characteristic roentgen observations are present in a high percentage of children with intestinal ascariasis, as shown by a barium cereal meal. These observations are: (1) soon after ingestion, a cylindric filling defect in the jejunum; (2) later a stringlike shadow, representing the barium-filled enteric canal of the parasite. Roentgen evidence is occasionally definite in the absence of ova in the stool.

UNUSUAL COMPLICATIONS OF PROSTATECTOMY

Among 200 cases of complication of prostatectomy reviewed by Wirt B. Dakin, Los Angeles (*Journal A. M. A.*, Dec. 13, 1930), there were five cases of infrequent complications: (1) Expulsion of portion of prostate through the urethra; (2) herpes zoster; (3) diaphragmatic hernia; (4) unusual postoperative hemorrhage, and (5) hyperpyrexia of 108 F. without death.

SIGMOIDOSCOPY VERSUS ROENTGEN RAYS IN DIAGNOSIS OF TERMINAL BOWEL DISEASE

Frank C. Yeomans, New York (*Journal A. M. A.*, Dec. 20, 1930), asserts that sigmoidoscopy is indicated and should be performed in every case presenting intestinal symptoms. Sigmoidoscopy usually gives more accurate data in diseases of the rectum and pelvic colon. Obtainable data frequently establish a correct diagnosis promptly, which is an economy for the patient and gives valuable information to the roentgenologist.

POSTURAL DRAINAGE AS APPLIED IN ABORTION AND OBSTET- RICAL CASES

N. W. BAIRD, M.D.

Atlanta

In embarking upon the subject of postural drainage, as I apply it in abortion and obstetrical cases, I have done so in pioneer fashion, in so far as the literature reviewed is concerned. The basis of this paper is one extending over a period of ten years and applying in over five hundred cases.

"A rolling stone gathers no moss"; the same thing may be equally said that a moving lochia permits no infection. The prime requisites of infection are as follows:

First. Contamination.

Second. A suitable field for multiplication of bacteria.

Third. Lowered local resistance.

Now as to the first factor, in the majority of our patients it is well nigh impossible to preclude contamination. A premature rupture of the membrane in cases delivered outside of the hospital and many times in the hospital predisposes to infection. Abortion cases who "have been seen" by other less fortunate members of our profession, by patient herself or some non-medical "friend", when done by instrumental means, are potentially infected.

As to the second factor: Blood is one of the best culture medias, when in a condition of stasis, therefore a niche in the cervical segment with open lymphatic and vascular radicals affords a most elegant field for propagation of pyogenic organisms. A condition of stasis which permits no, or at best a slow motion of lochia offers excellent opportunity for infection. The low hanging uterus, which though sufficiently normal to conceive, but still in a stage of passive congestion, due to the relaxation of support above and below, predisposes to infection. The uterus with a residual content, analogous to the bladder of an old man with a chronic prostatitis, which permits of only the supernatant portion being drained off, is most likely to become infected.

Trauma brought about by pressure from

the oncoming head and oftentimes accentuated by parturient measures, and the state of passive congestion referred to above are the third factors which might be mentioned as productive of pyogenic infection.

The head of the bed must be elevated just eight inches and should be done right away, if there are no contra-indications, as excessive bleeding or shock.

Comment

As stated in the second paragraph, if a lochial discharge is not permitted to stand, it not only defeats a factor of infection, i.e., stasis, but in a measure the field is washed off of any infection that may be potentially there. In addition to this factor, this position permits an easy emptying process of the uterine contents, thereby allowing no clots to form in uterine cavity and having less tendency to postpartum pain. As in many cases such pains are, oftentimes in the early hours of parturition, due to the foreign body in the uterine cavity in the form of a blood clot. It also permits patients to observe more easily the things going on around and about. Many of these patients have told me that they did not care to have the head of their bed lowered, when permitted to do so, because of this feature.

Since the employment of this procedure I cannot recall a single case of sepsis, either in abortion or obstetrical cases. I would not believe that my technique, otherwise, has been so good as to have such a record. I would not for a moment infer that I had not had cases with sepsis during this period in the abortion group, but these were definitely infected when they came into my hands.

Summary

1. The elevation of the head of the bed eight inches affords a natural drainage, which is not afforded by the use of dorsal decubitus position in abortion and obstetrical cases.
2. The simplicity of the procedure permits it to be carried out in every case.
3. There are no good reasons why this measure should not be used.

The eighty-second annual session of the Medical Association of Georgia will be held at the Biltmore Hotel, Atlanta, May 12, 13, 14, 15, 1931. The physicians of Atlanta are anxious for every member to attend. Make reservations at the "Biltmore".

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MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Association of Georgia

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VIVISECTION

Antivivisection legislation is being advocated more strongly at present than ever before. With the customary zeal of the fanatic those who are opposed to animal experimentation are pressing their claims. Let us not stoop to the level of abusing those who are sincerely sponsoring this cause, but let us realize the danger to the advance of medical knowledge which it presents, and take logical and effective steps to check it.

We as physicians should take advantage of every opportunity to teach the necessity of animal experimentation, particularly with dogs, in order to advance medical science. Without experimental work with dogs, insulin would never have been discovered. The fundamental researches of Whipple with dogs led to the liver treatment of pernicious anemia, and many other facts of vital importance to the health of humans have been discovered by experimentation on dogs. A discussion of these facts and a description of the humane methods of animal surgery could be presented to schools, women's clubs, and other organizations and help in a large measure to correct the hysteria of the antivivisectionists. Opportunities for this type of educational propaganda on a dignified basis could be made through the woman's auxiliary of our medical societies.

More especially we personally and through sympathetic friends should write to our legislators in Washington protesting against the proposed law to make illegal any experimental surgery upon dogs in the District of Columbia. This is an opening wedge of legislation which has powerful backers and which is capable of greatly inhibiting medical research.

Here, too, is an opportunity for us to demonstrate our own good faith by proposing, through our organized medical machin-

ery, resolutions and regulations which would prevent abuse of vivisection by careless, callous, or indiscreet members of our profession. Let us then demonstrate to the world the necessity, humanity, and value of carefully regulated, intelligent vivisection practiced by those who are qualified and under proper circumstances. Rather than being forced to curtail vivisection let us so organize and direct it that it will lose its stigma and bring credit and good-will to the laborers in the cause of science.

J. C. M.

ANNOUNCEMENT

The criterion by which a medical meeting is ultimately judged is its scientific program. We do not under-rate the enhancement of good-will which comes naturally out of our annual gatherings. When one tries to see the worthy qualities which abound in his neighbor, or his medical colleague, these are usually found sufficient to erase any cause for misunderstanding and to furnish a sound basis on which mutual friendship may be built. If therefore, one attended regularly the annual assembly of our Society for no other reason than that he might mingle with the rank and file of its membership he would be amply paid. Nor should entertainment

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.

in the form of open house parties., banquets, golf, trap shooting and the like, be given a dominant place when the assembly's program is planned. Such natural expressions of southern berth and tradition will continue to express the pride and pleasure felt by the host society when it is honored by a paternal visit in its home city. Moreover, the building of good fellowship and the program of entertainment must be looked upon as the adornment which, by design, augments the scientific appetite—lest we go away from a repast whose caloric value will be found inadequate to prepare us for the strenuous problems of every-day practice. We want a program then, with the customary embellishments, but let us also have more meat and since the mental attitude of the diner predetermines his ability to take lustily of the bill of fare, the Committee on Scientific Work urges that you point speci-

ally for the meat course in the approaching session in Atlanta and that you come with your appetite for scientific and clinical medicine so well whetted that you will stay by the program from soup to nuts.

But how shall we eat if we have no meat—meat that represents the viewpoint and experience in clinical medicine of the various districts of our great state. For years the Committee on Program has issued its appeal for papers to the whole membership, to have a response only from the centers of population with here and there a representative of our smaller cities and rural communities. Our program, to pursue the simile further, represents a "state products" dinner and should be contributed to from all parts of the commonwealth. We want the viewpoint of the doctor who digs deeply into the truths of the science of medicine but there is room for good old-fashioned clinical medicine such as grows out of the experience of the practitioner somewhat removed from the atmosphere of scientific debate.

With these thoughts in view your Committee at a recent meeting authorized the publication of this appeal. You are requested to mail titles for papers to the secretary, Dr. A. H. Bunce, not later than March 15, 1931, at which time the program will be made up. We want it to be, in fact, a state wide product. In this way we can best disseminate helpful suggestions among our membership as a whole and stimulate the development of the habit of thinking and writing on the part of many whose modesty has heretofore denied their fellows participation in the fruits of their labors. Help us to maintain both the art and the science of Georgia medicine.

Committee on Scientific Work

THE WHITE HOUSE CONFERENCE ON CHILD WELFARE

Elsewhere in this issue (page 1765) appears an extended account of the reports made available by the White House Conference on Child Welfare, held in Washington in November. Most of the newspaper reports covering the occasion emphasizes the attempts of various interests to take advantage of the conference to promote a campaign for a children's bureau separate from other health activities. As is usually the case, the element of conflict thus introduced dominated the publicity rather than the constructive efforts exemplified in the well-considered reports of committees that had been giving thought to the problems of child welfare, child health and education for the past year. In the care of the child lies the future of the nation; in the control of the education of the child and in the establishment of its habits early

in life lies the secret of its happiness in later years. The disposition among psychologists, psychiatrists, social workers, and specialists in various medical fields to separate their individual problems from the consideration of the whole baby is one of the destructive tendencies of the times. Superspecialization in the adult is a serious problem, notwithstanding the fact that the adult, through an understanding mind, is able frequently to ward off some of the evils associated with consideration of an organ, a tissue or a system within his body rather than with the human being as a whole. The child, unable to think for himself, succumbs readily to lopsided control, so that the body and mind may be distorted by superspecialization in its handling. In a great conference, such as that which has just been held, it is possible for all the various interests to come together and to exchange their views—indeed, to be forced into a realization that the child must be considered as a human being and not as a mental case, a handicapped arm, a case in malnutrition, or a problem in behavior.

The present administration of the government is apparently committed to unification of control in public health. Committees in the White House Conference charged with the consideration of administrative methods recommended that the health of the child be not separated from other problems of public health, but that it be brought properly under the attention of the United States Public Health Service. In an attempt of a revision of this point of view, women's clubs, welfare organizations, and indeed every possible influence that could be brought to bear were asked to telegraph to the conference in favor of the establishment of a special department of the government for the care of the child separate from the United States Public Health Service. On short notice and without thorough consideration of all the motives and principles underlying the matter, many organizations sent their telegrams. Fortunately, the conference was so organized that it could not be stampeded by any such method.

The immediate, practical outcome of the White House Conference is hard to determine. It had the advantage of causing several thousands of persons especially interested in the problem of child welfare to analyze and to co-ordinate their views. It caused the entire nation to be, for at least one week, child-minded. It will bring about, no doubt, the dissemination of much educational material to the public. The progress of a movement so auspiciously and expansively initiated will be observed with interest.—*Jour. A. M. A.*, Dec. 6, 1930.

A MEDICAL CENTER

In calling attention to Atlanta's importance as a medical center, the City Builder emphasizes a tremendous civic asset which has been recognized nationally, but which is not generally reflected upon at home. Atlantians take for granted the excellence of their hospitals and the eminence of their physicians and surgeons, without always giving these attributes due weight when reviewing the city's salient qualities. A great deal has been said of Atlanta's industrial, educational, financial, aerial, and commercial advantages, but the centering here of medical men and facilities not to be excelled, if equaled, by any city of similar size in the nation is of equal significance from every standpoint.

From the City Builder article penned by Dr. Allen H. Bunce, we learn that the American Medical Association has registered for Atlanta in 1930 twenty-eight institutions, hospitals and sanatoriums, with a total capacity of twenty-five hundred patients; that nine local hospitals have been approved for the training of nurses and five for the training of internes; that four institutions stand approved for the training of specialists in many fields; that six hundred and ninety physicians serve the city, and nine hundred nurses, and that Atlanta has ten registered clinics, exclusive of school clinics and those conducted at the City Hall and at institutions of correction. Atlanta's specialists cover the wide range of modern terminology, and to these specialists come daily people from all parts of the state and south, and many from remote sections of the nation. Atlanta's hospitals are performing "the five-fold function of caring for the sick, training those who are to care for the sick, preventing sickness, adding to the sum total of medical knowledge by research into the cause and cure of illness, and securing better medical service for the community". Emory University's great medical college, bearing a class A rating, completes the impressive picture.

Professional ethics forbid listing the numerous Atlanta physicians and surgeons who have attained national and international celebrity for their work. But it is well for Atlantians to recognize and acknowledge the good fortune which Atlanta's development

as a medical center has created. Atlanta has unlimited faith in the integrity and skill of her doctors, and their service to the community is beyond calculation. — *Atlanta Journal*, Atlanta,, Ga., Nov. 28, 1930.

COMMITTEE LISTS LOW-COST FOODS TO PROVIDE ADEQUATE DIET IN SOUTH

The widespread drought of 1930 has affected in two ways the food problem of many of those living in the Southern States the National Drought Relief Committee has recognized. Farms have been unproductive and livestock depleted, with a consequent decline in the income usually received from the sale of farm products. Also as the result of drought less food of all descriptions has been stored for home consumption. How an adequate diet containing the proper "protective" foods could be provided, with resources in home-grown food and ready cash limited, is one of the important problems facing the committee.

Pellagra, a disease prevalent in the South, results from the lack of certain factors in the food habitually eaten. It has been estimated that in the United States at least 200,000 individuals suffered from pellagra in 1929. Nutritionists believe that there will also be many pellagra cases in 1931 unless educational and relief measures are made effective promptly.

The people concerned need authoritative information which will help them to get at low cost the foods necessary for an adequate diet. The aim should be not only to prevent pellagra, but to improve health in every respect. To meet the situation, a subcommittee of the National Drought Relief Committee is planning to supply through home demonstration agents, nutritionists, home economics teachers, and other professional workers food facts needed by the affected sections.

Among the foods mentioned as good or excellent sources of the pellagra-preventive factor, are milk, lean muscle meat, liver, canned salmon, wheat germ, and pure dried yeast. Dried and canned milk are recommended when fresh milk cannot be obtained. The market lists include also the cereals and dried legumes—on which low-cost diets largely depend—vegetables and fruits to the greatest amount possible, fats, sweets, and some lean meats, fish and eggs. Food for children should differ in kind as well as in quantity from that for adults, and the needs of older children differ somewhat from those of younger. Consequently particular attention has been given to tables showing how to provide for these needs.

Further information about the tables and other material prepared for the use of nutrition workers in the drought regions can be obtained by writing to the Co-operative Extension Service or the Bureau of Home Economics of the United States Department of Agriculture, or to the representatives of the other co-operating organizations. This material will be in the hands of extension workers in the States affected as soon as possible, and can also be obtained from them.—Press Service, U. S. Department of Agriculture.

RADIO WAVES

Fourth Edition

"The strength of the Medical Association is not to be measured by its shadow, but by the remarkable shade of worthy service it affords."—*Moore*.

"Sell your profession by service, not by legislation."—*Fort*.

"Hold fast to the ideal of brotherhood and unselfish public service."—*Revell*.

"Cultivate the art of Medicine."—*Clark*.

"What was your percentage of postmortems last year?"—*Bunce*.

"The greatest service to our patients and full cooperation with our fellow physicians should be our motto."—*Myers*.

"Success depends on what you are, know, and do."—*Redfearn*.

"Osler's magic word of medicine, 'work', is still the magic word of modern medicine."—*Patterson*.

"Do not worry about yesterday, enjoy today."—*Roberts*.

"If we spend sufficient time looking for our own shortcomings and correct them, we will not have enough of this commodity left to find the shortcomings of others."—*Thrash*.

"Don't forget the fact that your brother physician's feelings are just as sincere as yours."—*Head*.

"The greatest opportunity for service of the medical men today is one of prevention."—*McCord*.

"Let us be more alive to the varied opportunities of our profession."—*Fullilove*.

"Sooner or later the general public will realize that organized medicine is public health's greatest friend."—*Ayers*.

"Profit by your mistakes to the extent that they are not repeated."—*Lewis*.

"Try to make every day a march in the year's endeavor."—*Coleman*.

"No child should ever be permitted in this age to grow up with a physical handicap that modern science can correct."—*Wall*.

"Let every physician in Georgia smile t. i. d., especially during the lean years."—*Bancker*.

"Cherish your enthusiasms, but don't let any of them run away with you."—*Blackford*.

"Present a scientific exhibit in conjunction with papers presented at the annual session of the Medical Association of Georgia."—*Dougherty*.

"Doctors should organize to direct rather than be the victims of the economic readjustments taking place in medical practice such as insurance, corporation, and contract practice."—*Massee*.

COUNTY SOCIETIES

1931 HONOR ROLL*

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 4, 1930.

2. Butts County, Dr. Robert L. Hammond, Jackson, December 2, 1930.

*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

NEW MEMBERS FOR 1931

Bell, Payton E., Sylvester.

Blake, H. H., Savannah.

Clay, Thos. S., Savannah.

Hall, Wm. J., Oakfield.

Haygood, M. F., Alto.

Holton, C. F., Savannah.

Howkins, John S., Savannah.

McGinty, W. R., Moultrie.

Meldrim, C. H., Savannah.

Waters, L. T., Savannah.

Wilson, Please, Newborn.

COUNTIES REPORTING FOR 1931

Randolph County Medical Society—100%

The Randolph County Medical Society announces the following officers for 1931:

President—J. C. Patterson, Cuthbert.

Vice-President—A. L. Crittenden, Shellman.

Secretary-Treasurer—G. Y. Moore, Cuthbert.

Delegate—F. S. Rogers, Cuthbert.

Alternate Delegate—E. C. McCurdy, Shellman.

Censors—E. C. McCurdy, W. W. Crook, and F. S. Rogers.

Tri-County Medical Society

The Tri-County Medical Society announces the following officers for 1931:

President—B. K. Simmons, Blakely.
Vice-President—L. C. Ward, Damascus.
Secretary-Treasurer—W. O. Shepard, Bluffton.
Delegate—J. G. Standifer, Blakely.
Alternate Delegate—C. K. Sharp, Arlington.
Censors—J. G. Standifer, J. L. Cheshire, and S. P. Holland.

Jackson County Medical Society

The Jackson County Medical Society announces the following officers for 1931:

President—C. B. Lord, Jefferson.
Vice-President—A. A. Rogers, Commerce.
Secretary-Treasurer—H. H. Lancaster, Hoschton.
Delegate—L. C. Allen, Hoschton.
Alternate Delegate—F. M. Hubbard, Commerce.
Censors—W. C. Kennedy, J. C. Verner, and E. M. McDonald.

Dougherty County Medical Society

The Dougherty County Medical Society announces the following officers for 1931:

President—J. P. Tye, Albany.
Vice-President—F. K. Neill, Albany.
Secretary-Treasurer—I. M. Lucas, Albany.
Delegate—I. W. Irvin, Albany.
Alternate Delegate—W. S. Cook, Albany.

Clarke County Medical Society

The Clarke County Medical Society announces the following officers for 1931:

President—M. A. Hubert, Athens.
Vice-President—Linton Gerdine, Athens.
Secretary-Treasurer—J. D. Davis, Athens.
Delegate—John A. Hunnicutt, Athens.

Burke County Medical Society

The Burke County Medical Society announces the following officers for 1931:

President—J. B. Lewis, Waynesboro.
Vice-President—W. W. Hillis, Sardis.
Secretary-Treasurer—J. M. Byne, Jr., Waynesboro.
Delegate—H. A. Macauley, Waynesboro.
Alternate Delegate—R. L. Miller, Waynesboro.
Censors—J. M. Byne, Sr., J. M. Cook, and W. W. Hillis.

Worth County Medical Society

The Worth County Medical Society announces the following officers for 1931:

President—J. L. Tracy, Sylvester.
Vice-President—H. S. McCoy, Sylvester.
Secretary-Treasurer—Gordon S. Sumner, Sylvester.
Censors—W. W. Sessions, E. D. Ford, and W. C. Tipton.

Fulton County Medical Society

The Fulton County Medical Society announces the following officers for 1931:

President—T. C. Davison, Atlanta.
President-Elect—Dan Y. Sage, Atlanta.

Vice-President—William A. Smith, Atlanta.

Secretary-Treasurer—Howard Hailey, Atlanta.

Ware County Medical Society

The Ware County Medical Society announces the following officers for 1931:

President—B. R. Bussell, Waycross.
Vice-President—George E. Atwood, Waycross.
Secretary-Treasurer—Kenneth McCullough, Waycross.
Delegate—J. E. Penland, Waycross.

Colquit County Medical Society

The Colquit County Medical Society announces the following officers for 1931:

President—C. B. Slocumb, Doerun.
Vice-President—W. R. McGinty, Moultrie.
Secretary-Treasurer—T. H. Chesnutt, Moultrie.
Delegate—J. E. Lanier, Moultrie.
Alternate Delegate—C. C. Brannen, Moultrie.
Censors—M. D. Striplin, E. L. Lawson, and S. M. Withers.

Terrell County Medical Society

The Terrell County Medical Society announces the following officers for 1931:

President—S. P. Kenyon, Dawson.
Vice-President—W. P. Durham, Sasser.
Secretary-Treasurer—Logan Thomas, Dawson.

Richmond County Medical Society

The Richmond County Medical Society announces the following officers for 1931:

President—A. J. Kilpatrick, Augusta.
Vice-President—E. A. Wilcox, Augusta.
Secretary-Treasurer—J. H. Sherman, Augusta.
Delegate—L. P. Holmes, Augusta.
Delegate—W. R. Houston, Augusta.
Censors—G. T. Bernard, Chairman; W. J. Cranston, and George A. Traylor.

Sumter County Medical Society

The Sumter County Medical Society announces the following officers for 1931:

President—B. J. Wise, Plains.
Vice-President—J. C. Logan, Plains.
Secretary-Treasurer—A. C. Primrose, Americus.
Delegate—J. C. Logan, Plains.
Alternate Delegate—J. T. Stukes, Americus.
Censors—Kenneth Wood and Ford Ware.

Carroll County Medical Society

The Carroll County Medical Society announces the following officers for 1931:

President—L. E. Wilson, Bowdon.
Vice-President—D. S. Reece, Carrollton.
Secretary-Treasurer—H. J. Goodwyn, Carrollton.

Floyd County Medical Society

The Floyd County Medical Society announces the following officers for 1931:

President—C. H. McArthur, Rome.
Vice-President—W. B. Floyd, Rome.
Secretary—Robert M. Harbin, Jr., Rome.
Treasurer—William J. Shaw, Rome.

Clayton-Fayette Counties Medical Society

The Clayton-Fayette Counties Medical Society announces the following officers for 1931:

President—J. R. Wallis, Lovejoy.

Secretary-Treasurer—T. J. Busey, Fayetteville.

Hall County Medical Society

The Hall County Medical Society announces the following officers for 1931:

President—C. D. Whelchel, Gainesville.

Vice-President—C. G. Butler, Gainesville.

Secretary-Treasurer—W. R. Garner, Gainesville.

Henry County Medical Society

The Henry County Medical Society announces the following officers for 1931:

President—R. L. Crawford, Locust Grove.

Vice-President—Robert L. Tye, McDonough.

Secretary-Treasurer—E. G. Colvin, Locust Grove.

Delegate—J. G. Smith, McDonough.

Censors: Robert L. Tye, J. W. Harper and H. C. Ellis.

Cherokee County Medical Society

The Cherokee County Medical Society announces the following officers for 1931:

President—D. H. Garrison, Tate.

Vice-President—R. M. Moore, Waleska.

Secretary-Treasurer—Geo. C. Brooke, Canton.

Delegate—J. P. Turk, Nelson.

Washington County Medical Society

The Washington County Medical Society announces the following officers for 1931:

President—N. J. Newsom, Sandersville.

Vice-President—B. L. Helton, Sandersville.

Secretary-Treasurer—W. M. Cason, Sandersville.

Delegate—E. S. Peacock, Harrison.

Alternate Delegate—J. H. Burdett, Tennille.

Censors—J. B. Dillard, S. B. Malone, and T. E. Vickers.

Jefferson County Medical Society

The Jefferson County Medical Society announces the following officers for 1931:

President—J. D. Peacock, Wadley.

Vice-President—George L. Carpenter, Wrens.

Secretary-Treasurer—S. T. R. Revell, Louisville.

Delegate—S. T. R. Revell, Louisville.

Censors—John R. Lewis, Walter B. Holmes, and J. D. Peacock.

Spalding County Medical Society

The Spalding County Medical Society announces the following officers for 1931:

President—H. W. Copeland, Griffin.

Vice-President—D. L. Head, Zebulon.

Secretary-Treasurer—H. J. Copeland, Griffin.

Censors—W. C. Miles, Chairman; K. S. Hunt, and A. H. Frye.

Butts County Medical Society

The Butts County Medical Society announces the following officers for 1931:

President—B. F. Akin, Jenkinsburg.

Vice-President—A. F. White, Flovilla.

Secretary-Treasurer—R. L. Hammond, Jackson.

ACUTE BENIGN INFECTIOUS MYELITIS

Attention is called by Irving J. Sands, Brooklyn (*Journal A. M. A.*, Jan. 3, 1931), to a recoverable type of myelitis. Following infection of the upper respiratory channels there occurs, in young persons, paralysis of the lower extremities with loss of deep tendon reflexes, loss of abdominal reflexes, retention of urine, and subjective as well as objective sensory disorders segmental in distribution. There is slight leukocytosis. The spinal fluid shows an increase in protein and relatively little cellular reaction. Recovery is apparently rapid and complete. A relationship between this disease and epidemic encephalitis is suggested.

CLINICAL SIGNS OF HEART DISEASE

James B. Herrick, Chicago (*Journal A. M. A.*, Nov. 29, 1930), asks: Why should not physicians employ in diagnosis the classification suggested by the Heart Committee of the New York Tuberculosis and Health Association, which is in conformity with the nomenclature for cardiac diagnosis approved by the American Heart Association? The case of aortic leak might then be called syphilitic aortitis with aortic regurgitation, cardiac hypertrophy, regular sinus rhythm, Class 2-A; *i.e.*, activity slightly limited. Here the etiologic and pathologic anatomic features are plainly set forth with the clinical and functional facts also considered. The case of mitral stenosis may be described as rheumatic mitral disease with stenosis, auricular fibrillation with activity seriously limited, classed briefly as Class 2-B. Again, etiology, anatomic pathologic lesion and functional capacity are expressed. All of these features may with advantage be included in the diagnosis. In a discussion of clinical signs of heart disease with particular reference to etiology, the questions involved are difficult, the answers somewhat uncertain. Too many cases are encountered in which even with greatest care the cause of the cardiac symptoms may escape detection. But it is only by trial and search that knowledge will come. The search for causes, the comparison of results, together with statistical, clinical, and necropsy studies will enable one to be more accurate in the diagnosis than has been the case in the past. To be impressed by the lack of uniformity in diagnosis, one has only to go to the health department of any large city and look over the causes of death as recorded on the death certificates. Syphilis as a cause is rarely put down, largely because of the physician's desire to shield the reputation of the dead man and his family. Pericarditis, endocarditis, and myocarditis and angina pectoris are in evidence. On the whole, the diagnoses are vague and lack uniformity. A statement on the death certificate as to the cause of the disease, or even that the cause was unknown, would be helpful. It would show to the student of statistics that this point had been considered and would permit of deductions that would otherwise be unwarranted. Herrick offers suggestions.

GEORGIA STATE NURSES ASSOCIATION

Officers

President—Miss Lucia Massee, R. N., Cuthbert
 First Vice-President—Miss Dora A. Kershner, R. N., Macon.
 Second Vice-President—Mrs. Mae M. Jones, R. N., Milledgeville.
 Secretary—Miss Winnie B. Wood, R. N., Macon.
 Treasurer—Miss Jane Van De Vrede, R. N., Atlanta.
 Miss Jane Van De Vrede, R. N.
 Executive Secretary

District Presidents

First—Mrs. Dorothy Treacle, R. N., Savannah.
 Fourth—Miss Eva Chalkley, R. N., Columbus.
 Fifth—Mrs. Sue B. Paille, R. N., Atlanta.
 Sixth—Miss Dora A. Kershner, R. N., Macon
 Seventh—Miss Shirley Hamrick, R. N., Cedartown.
 Eighth—Mrs. W. C. Thurmond, R. N., Athens.
 Ninth—Miss Ruby Falls, R. N., Gainesville.
 Tenth—Mrs. Joseph Akerman, R. N., Augusta.

Headquarters

131 Forrest Avenue, N. E., Atlanta.

THE PRESIDENT OF THE AMERICAN NURSES' ASSOCIATION SENDS GREETINGS

"By organized effort the nurses of this country can solve their problems—notable among which is unemployment," said Miss Elnora E. Thomas, President of the American Nurses' Association, in her editorial in the January issue of the American Journal of Nursing.

"We are putting our best thinking and greatest effort into the consideration of ways in which unemployment can be solved. We recognize it involves many things. Certainly we know that we must work out new services for nurses and new methods for giving the older services. A nationwide committee, with our Headquarters' staff, is now at work on this problem, and all nurses have been asked to help with information and suggestions. We must work toward a solution which can have a permanent value.

"As problems come before us, we are made more conscious of our responsibilities as a professional group. We have our responsibility toward our patients. Another responsibility is toward our own group, and this would appear to have two phases—one having to do with our own individual service, and the other through active participation in the work of our Associations.

"The present status of our organizations is ours because nurses have given time and effort to their development since the days of their beginning, when the problems confronting them must have seemed almost unsolvable; *and we can solve our problems now*

only if we have the combined efforts of all graduate nurses. It is a responsibility not only to the present generation of nurses and the generations to come, but also to those who founded our profession, for we must keep to the standards they have given us."

*Greetings From Lucia M. Massee
 President of the Georgia State
 Nurses' Association*

With the advent of each New Year it is a joy to greet our friends. With such a feeling in my heart I greet the nurses of Georgia, wishing for each of them a year of happy satisfactions.

We are twenty-five years old this year, as an organized body of Registered Nurses, and will celebrate our "silver jubilee" in Savannah in the fall. How appropriate it is that we are putting on a statewide campaign for members, and that we shall have the opportunity to cooperate with the American Nurses' Association in making of it a marked success.

Personally, I am not only confident that the G. S. N. A. will be able to secure the modest increase of 20 per cent, but I believe without undue effort we can secure an increase of 25 per cent—1 per cent for each year of our Association's existence!

As the National office expresses it, there are only two types of non-member nurses to be reached in this membership drive—the graduating senior of the class of '31, and the older nurse who has not yet discovered how much the A. N. A. can mean to her; or how much she can mean to her organization. Of how she "can take her place with the other nurses of her state who

are working to help their guardian, the A. N. A.", to quote Miss Thomson.

In Georgia, less than one third of our R. N.'s are members of the G. S. N. A., which means that less than one third are carrying the professional responsibility for all who are eligible to practice. Perhaps we ourselves are all to blame for this state of affairs. We have not made the right appeal to the individual nurse, or the right approach to the whole question. But now, when we have a National as well as a statewide membership campaign on, our honor is at stake and we must know no failure. In Miss Kershner we have a fine membership chairman, and her committee reaches into every district. There can be no excuse for failure. Don't forget what Kipling said about teamwork. Teamwork of the district, the alumnae and the individual will mean a successful membership campaign in Georgia. Then the joybells can ring when we reach Savannah next fall.

Ring out the old, ring in the new,
Ring happy bells, across the snow;
The year is going, let him go,
Ring out the false, ring in the true.

*Mrs. Tupman Issues Greetings to the
Nurses of Georgia*

In extending cordial greetings for the New Year and an earnest wish for the happiness of each member of the nursing organizations in Georgia, I wish to add my sincere congratulations for the successful building of so firm a foundation for the advancement of all branches of nursing in our state. For the New Year, I am asking your assistance along three lines of special endeavor.

First, to make the membership campaign of the Georgia League of Nursing Education a real success. Our goal is one hundred members.

Second, to make the convention of the National League of Nursing Education, which will be held in Atlanta, May 4-9, 1931, the very best that organization has ever held.

Third, to make this year, which marks the 25th anniversary of the Georgia State Nurses' Association, one that will ever stand out as a beacon light to all those who may follow in our footsteps.

Please give these three items your careful consideration. I trust that they may command your interest and approval.

EVA S. TUPMAN, *President*

Georgia League of Nursing Education.

Message from Lillian M. Alexander, President of the S. O. P. H. N.

As President of the State Organization for Public Health Nursing it is my happy privilege to bring to you the Season's greetings.

As 1931 marks the twenty-fifth anniversary of the Georgia State Nurses' Association, it is quite fitting that we should have a rousing membership campaign.

The State Organization for Public Health Nursing is this year celebrating its fifth birthday, and while we have not planned a special campaign for new members, we should strive individually for a goal of 100 per cent. Membership gives us a sense of security and protection, which we all need. We improve ourselves as well as render service when we actively participate in our respective fields, and each nurse should deem it an honor to be a member of her alumnae, district, state, and national organizations. There is no progress without organization.

One of the great English philosophers says, "There is nothing permanent but change." New facilities are being devised and the educational forces are being coordinated for purposes of wider educational opportunities in every field. The nurse must continue to improve herself to meet the demands of the changing order. The public has more health knowledge than has ever been known before in the history of the world.

The spotlight has truly been turned on the whole field of education, and if education is "living", surely the nursing field, which we have chosen, may almost be called the top soil, because without understanding the laws of health and life, the spiritual and intellectual development of the individual cannot be perfected. Education was the keynote of the recent White House Conference on Child Health and Protection. President Hoover said, "If we could have but one generation of properly born, trained, educated and healthy children, a thousand other

problems of government would vanish." Education on *the job* was stressed.

The contribution that the nursing profession, hand in hand with the medical profession, is making to the citizenship of this country, as well as to the science of living, is no small one. Our nursing program is so allied with the educational and social welfare fields that they cannot be separated. A knowledge of both is essential. When the nurse ceases to use her hands she loses the one thing that distinguishes her from the social worker and health teacher.

Latest reports from the N. O. P. H. N. say "it is difficult to find enough candidates who are well prepared and who are free to move about so they can take advantage of an opportunity wherever it occurs". Should we not strive to seek out from our membership those nurses who appear to have ability along the lines of leadership, and through our own organizations make possible scholarships and loan funds which will enable them to secure adequate training?

May I congratulate you on the support which you have given our organization in the past and on your desire to be of ever-increasing service toward the world in the alleviation of mental and physical suffering?

As one interested in each and every nurse, I trust that the New Year will bring success and happiness.

Cordially yours,

LILLIAN M. ALEXANDER, R. N.

G. S. N. A. Program for 1931

There are a number of interesting things on our 1931 calendar.

First, we are to have Miss Dora M. Cornelisen of the staff of the American Journal of Nursing for a six weeks' visit in Georgia. Miss Cornelisen is Field Representative of the American Journal of Nursing and a Director of the American Nurses' Association. She will tell the story of the history of the Journal, which is the official organ of our State Association, and make plain to many who are not now familiar with it the worth of the Journal as a standard text and reference, as well as a most interesting publication from a narrative standpoint.

Unfortunately, Georgia's position is not an enviable one when it comes to the ques-

tion of subscribers to the Journal, as compared with our State Association membership, and the G. S. N. A. is delighted to have Miss Cornelisen here to do some real "missionary work" which will help us to secure our rightful place.

District leaders are cooperating with regard to her proposed visits to district organizations, alumnae associations, etc., and Miss Cornelisen will be glad to meet alumnae groups, individually or in joint session, where a district meeting is not feasible. A tentative itinerary has been arranged for her by Headquarters. Miss Cornelisen will arrive in Atlanta January 27th. She will visit South Carolina when she leaves Georgia.

Membership Campaign

A membership campaign, under the chairmanship of Miss Dora A. Kershner, will constitute an important part of the State Association's program this year, and will mark our silver, or 25th, anniversary.

Simultaneously, the American Nurses' Association celebrates its 35th anniversary with a campaign through the states for a "birthday gift of one hundred thousand members", or a 20 per cent increase over present membership.

This will require Georgia to get 436 new or renewed memberships by September 1st. But our goal should be 1500. In securing new members, the G. S. N. A. is strengthening itself and the A. N. A., and is dividing professional responsibility with nurses who have been enjoying the general benefits of the State Nursing Association, but may not have accepted the challenge to share in the actual work of the organization, or to assume such responsibilities. Every member can see that some nurse is reached.

Coming as the campaign does during the height of the season of unemployment, so to speak, it is a striking challenge and perhaps just the stimulus we need to prove that no matter what the economic situation may be, no matter what our own positions may be, organization is imperative—was never so imperative, in fact—if we are to "carry on" to victory!

We are told that the Medical Association, last year, increased its membership 20 per cent. We can do as well, or better.

Read Miss Virginia McCormick's article, "Your Guardian Celebrates", in the January number of the American Journal of Nursing. It is a fine article and a composite opinion of nurse leaders of the worth of organization to any profession or group.

Miss Dora A. Kershner, state chairman for membership, announces that the campaign will be carried on through the District Committees, and through hospital heads, so that no nurse will be overlooked. She asks for suggestions for a membership slogan (address Miss Kershner care Oglethorpe Private Infirmary, Macon) and says that she is confident that Georgia will be at or near the top of the list at the end of the campaign!

Annual Year Book

A third item of interest in our program is publication of the annual year book, which is in the hands of a special committee, Miss Minnie Bass, Chairman. All communications or suggestions regarding the year book, advertising, etc., should be sent direct to Miss Bass, Wesley Memorial Hospital, Emory University, Ga.

Another outstanding feature of the 1931 calendar is the convention of the National League of Nursing Education, to be held in Atlanta, May 4-9, with the Georgia League and the Georgia State Nurses' Association sharing responsibility as hosts. It is estimated there will be about one thousand delegates present, coming from all parts of the country.

Renewal of Registration

The season of the renewal of registrations is the happiest of all the year for us at Headquarters. The office takes on the activity of a busy railroad station or the savings deposit windows at the bank. Every one is coming or going, and though the nurses remain but a moment, it is our annual chance to get acquainted, and we make the most of it. The good wishes and friendliness of each day makes work a joy. We leave late and tired, but happy.

And the mail! Our office looks like Santa Claus' special post office just before Christmas! Which reminds us that, in hurrying off her dollar, occasionally a nurse forgets to fill in the renewal blank, and the dollar reaches our office minus any name or

identification. Then we have to become "detectives". So far, however, we have identified every dollar! But if you fail to receive your 1931 card promptly, before losing your temper (?) write us, won't you? We may be waiting with the other pieces of the puzzle. All we need is your name in order to solve it!

COMMUNICATIONS

Tuberculosis Control

Dr. J. A. Redfearn,
Albany, Georgia,
Dear Doctor:

The Georgia State Board of Health, through the Tuberculosis Sanatorium is making a serious endeavor to extend to the people of the State through their physician, a definite tuberculosis control service. Clinics have already been held in your county. Dr. Abercrombie and the Governor of the State are quite anxious to have a brief, but unbiased expression of your opinion of the need for, and value of, case-finding, diagnostic, and follow-up service which we are developing. If, in your opinion, this is a sound and logical project, there is a prospect of our securing the necessary financial support for its expansion.

Please let me have an expression of your exact attitude by return mail. In answering use the reverse side of this letter.

M. F. HAYGOOD, M.D., *Director*,

Division of Tuberculosis Control.

Alto, Ga., Dec. 15, 1930.

Dr. M. F. Haygood,
Alto, Georgia.

Dear Dr. Haygood:

In reply to your letter of December 15th in reference to tuberculosis. If the State of Georgia puts on a definite tuberculosis control service which will be beneficial to the public and to the physicians. It will be of inestimable value because it will aim at the heart of the matter, namely, prevention. The clinic held here was well supported by the community and local physicians.

For a number of years I have written and practiced the advantages of home treatment of pulmonary tuberculosis. I am convinced that climate has nothing to do with treatment and that diet and bed rest are the main essentials. Some cases are best treated in institutions, of course, but a stimulated interest in community treatment will make it so much better for doctors, and earlier diagnosis, thus beginning treatment when the most good can be done, namely, in the early stages.

Dr. Richard C. Cabot told his class in 1926 that within ten years tuberculosis would not be a serious problem any more in his state, chiefly because physicians had been taught that something could be done at home and because institutions were scattered all over the state, making it possible for patients who

were sent there to remain near home, friends and relatives. It is a great economic question because the bulk of it occurs in the struggling period of life, that is, under thirty. When we doctors learn to make earlier diagnosis and help these young fathers and mothers or children to recover largely at home, we will then really accomplish a control of the disease. Certainly all of the incurables should be sent to institutions never to return. Other selected cases should be sent for a period to Alto, but the majority, after properly diagnosed and treated will fare best at home, irrespective of elevation. Hoping that you may secure the necessary financial support, and further assuring you of my cooperation, I am

J. A. REDFEARN

Albany, Georgia, Dec. 17th, 1930.

INVITATION TO JOIN

To the Editor:

Inclosed you will find a form letter from the American Medical Editors and Authors Association which begins "Dear Doctor". Realizing that I am neither editor nor author, I broke through this veil of flattery, made some investigations, and concluded to use my five dollars for another purpose. Doubtless our entire membership will be interested in this matter.

J. A. REDFEARN, M.D.

Albany, Ga., Nov. 4, 1930.

DEAR DOCTOR:

The Executive Council of the American Medical Editors Association passed the following resolution, September 19, 1928:

"RESOLVED: That a joint Association be formed to be known as the American Medical Editors and Authors Association, and that the outstanding medical writers be invited to become members. The value of admitting leading authors to close and intimate association with editors and publishers will, by personal contact, solve many of the problems which ordinarily arise between author and publisher, or author and editor."

In accordance with this resolution, you are invited to apply for membership in the American Medical Editors and Authors Association, application for which will be acted upon at the next meeting of the Council at the New York Academy of Medicine.

Most cordially yours,

H. A. HUNT, *President*,

American Medical Editors and Authors Ass'n.

TREATMENT OF CARCINOMA OF BLADDER BY SURGICAL DIATHERMY

A group of 109 unselected cases of carcinoma of the bladder was studied by Herman L. Kretschmer, Chicago (*Journal A. M. A.*, Dec. 6, 1930). All of the cases were treated with a single agent, namely, surgical diathermy. In seventy cases, or practically two-thirds of the cases seen, the condition was far advanced and the results from the standpoint of cure were highly unsatisfactory and the mortality rate was high. In twenty-three cases seen, relatively early, without much involvement of the bladder wall, the results were unusually good.

NEWS ITEMS

The White House Conference on Child Health and Protection was held at Washington, D. C., November 19, 20, 21, 22. Members of the Association invited to attend were as follows: Dr. T. F. Abercrombie, Commissioner of Health, Atlanta; Dr. Joe P. Bowdoin, Atlanta; Dr. Allen H. Bunce, Secretary-Treasurer of the Association, Atlanta; Dr. J. P. Kennedy, City Health Officer, Atlanta; Dr. William A. Mulherin, Augusta; Dr. G. Y. Moore, President of the Association, Cuthbert.

The Fulton County Medical Society met at the Academy of Medicine, 38 Prescott Street, N.E., Atlanta, December 18th. The following officers were elected for the ensuing year: Dr. Dan Y. Sage, President-Elect; Dr. William A. Smith, Vice-President; Dr. W. Frank Wells, member of the Board of Trustees; Dr. George W. Fuller, member of the Board of Arbiters; Dr. Joseph Yampolsky, editor of the *Bulletin*; Dr. Howard Hailey, re-elected Secretary-Treasurer for a term of three years. Reports of the chairmen of committees were read.

The American Medical Association will hold its next session at Philadelphia, Pa. A committee from Georgia has been appointed to pass on the eligibility of scientific exhibits, assign space and direct the preparation of display cards. The committee consists of Dr. Roy R. Kracke, Chairman; Dr. W. A. Selman and Dr. E. D. Shanks, all of Atlanta. Applications for space in the scientific exhibit should be forwarded to the chairman before February 1st. It should also state the nature of the exhibit.

Dr. C. R. Barksdale, Blakely, has been re-elected as county physician for Early County for 1931.

The Jackson County Medical Society met at the Harrison Hotel, Commerce, on December 4th. A paper entitled "Pneumonia" was read by Dr. J. C. Bennett, Jefferson. Officers for the ensuing year were elected.

The Georgia Medical Society, Savannah, held its annual meeting on December 9th. Annual reports of the officers and chairmen of committees were read. Officers were elected for 1931, as follows: Dr. W. A. Cole, President-Elect; Dr. E. J. Whelan, Vice-President; Dr. Julian K. Quattlebaum, Secretary-Treasurer; Dr. William H. Myers, re-elected as a member of the Board of Trustees for a term of five years.

Dr. Joseph Yampolsky, Atlanta, read a paper on "Modern Trends in Medicine" before the Shearith Israel Congregation in Atlanta on November 21st.

Dr. Guy G. Lunsford, Cordele, Health Officer for Crisp County, held clinics during the week of November 24-29, beginning the program of the State Board of Health through the Tuberculosis Sanatorium, of Alto, for tuberculosis control.

Dr. Horace Darden, Sparta, attended the meeting of the Sixth District Medical Society at Macon, on December 3rd. He delivered an address on the "Treatment of Pneumonia".

The Bartow County Medical Society met at Cartersville on December 3rd. Officers for 1931 were elected as follows: Dr. T. Lowry, Cartersville, President; Dr. A. C. Shamblin, Cartersville, Secretary-Treasurer.

Dr. B. H. Minchew, Waycross, was awarded the Baynard Knight loving cup by the Waycross Kiwanis Club at its annual meeting on December 18th for the most outstanding service rendered to his community by any person during the year 1930. Mr. Ralph Newton, superintendent of the city schools, made the presentation and spoke in part as follows: "The man to whom the Baynard Knight loving cup is being awarded for 1930 joins a distinguished group of constructive Kiwanians. He joins this distinguished group meriting in his own right the honor and distinction. The great Kiwanis movement to which we belong stands for placing the spiritual above the material. Such is the care of the underprivileged. A distinct character of our civilization is our care for those who have not what they ought to have. The man to whom this cup is being awarded is outstandingly distinguished for his love of the underprivileged. He who saves a child, saves many. He has saved and helped and bettered the life of many and many a child."

The New York Polyclinic Medical School and Hospital of New York City opened for inspection its new private pavilion and operating rooms on December 29-30. It announces the appointments of Dr. George D. Stewart as Consulting Surgeon; Drs. Evan Evans, Orrin S. Wrightman, and C. N. B. Camac as Consulting Physicians to the hospital.

The Richmond County Medical Society held its annual meeting on December 18th. Officers for 1931 were elected.

The American College of Physicians will hold its next annual meeting in Baltimore, Md., March 23-27, 1931. The Lord Baltimore Hotel will be headquarters.

The Lowndes County Medical Society met at the Valdes Hotel, Waycross, on December 12th. Officers were elected for the ensuing year.

The Tri-County Medical Society met at Blakely on December 10th. Officers for 1931 were elected. Dr. J. G. Standifer, Blakely, read a paper on "Emergency Operation for Strangulated Hernia"; Dr. C. K. Sharp, Arlington, read a paper entitled "Obstetrics in the Home".

The Spalding County Medical Society met at Griffin on December 16th. Officers were elected for 1931.

The Atlanta Clinical Society held its first formal dinner at the Brookhaven Country Club on October 29th. Mr. George W. West, the principal speaker, took as the subject of his address, "The Business Man Looks at the Doctor". Dr. Russell H. Oppenheimer spoke on "Problems in the Future of Medicine". The Society took as its theme for the evening, "Confederate Medicine". Dr. Lewis M. Smith, President, as "Colonel

Samuel Preston Moore, Surgeon General of the Confederate Armies", introduced the speakers. Dr. William A. Smith, as "Dr. John B. Davidge, one of the founders of the University of Maryland Medical School, 1807", told of the medical schools in which the Confederate surgeons were trained. Dr. L. Minor Blackford, as "Editor of the *Georgia Blister and Critic*, 1854-1860", spoke on the medical literature of the period. Dr. Lynn Fort, as "Dr. Edward Warren, Surgeon General of North Carolina, and Author of 'Epitome of Practical Surgery for Field and Hospital, 1862'", and Dr. Joseph C. Massee, as "Dr. James McFadden Gaston, Surgeon General of Anderson's Division, and grandfather of two members of the Atlanta Clinical Society", told of their experiences as military surgeons. Dr. Herbert S. Alden, as "Captain H. Wurcz, Adjutant of Andersonville Prison", vividly described the horrors of that prison. The scene suddenly shifted from the past to the distant future, when Dr. Thomas Bolling Gay, as the "Last Survivor of the Atlanta Clinical Society", tottered into the hall and reminisced of those ignorant days of 1930 when people actually permitted surgeons to carve them up.

The Terrell County Medical Society met at the courthouse at Dawson on December 19th. Officers were elected for the ensuing year. Dr. S. K. Kenyon, Dawson, President, delivered an address showing the advantages in holding regular meetings and having good attendance. Dr. Lucius Lamar, Dawson; Dr. J. G. Dean, Dawson, and Dr. W. P. Durham, Sasser, gave case reports which were discussed by Dr. J. H. Lewis and Dr. Logan Thomas, both of Dawson. The president appointed a "Program Committee" to select essayists and titles for papers for each meeting to be held during the year. Dr. S. P. Kenyon, Dawson, will read a paper at the January meeting entitled "The Diagnosis and Treatment of Heart Diseases". Dr. Logan Thomas, Dawson, will read a paper at the February meeting, and Dr. W. P. Durham, Sasser, at the March meeting. Regular monthly meetings will be held at the courthouse in Dawson on the fourth Fridays of each month at 3:00 p.m.

Dr. J. H. Mull, Rome, retiring President of the Floyd County Medical Society, entertained the members of the society to dinner at the Armstrong Hotel on December 19th. Dr. C. H. McArthur, Rome, was elected President for the ensuing year; Dr. W. B. Floyd, Rome, Vice-President; Dr. Robert M. Harbin, Jr., Rome, Secretary, and Dr. W. J. Shaw, Rome, Treasurer.

Dr. J. M. Price, Tifton, was host to the physicians of the city and county at a six-course dinner served at his home, North Central Avenue, on December 17th.

Emory University School of Medicine, Emory University, announces the receipt of a gift from Mr. Joseph Brown Whitehead, Jr., for the establishment of a Laboratory of Surgical Research to be known as the Joseph Brown Whitehead Laboratory of Surgical Research. The gift will be a memorial to his father,

the late Joseph Brown Whitehead. In addition, he has provided for a Fellowship to be known as the Joseph Brown Whitehead Fellow in Surgical Research.

Dr. James H. Byram announces the removal of his office to 811 Forsyth Building, Atlanta.

Dr. Guy G. Lunsford, formerly of Cordele and Health Officer for Crisp County, has accepted the position of Commissioner of Health for Jenkins County and removed to Millen.

The American College of Surgeons met at New Orleans, La., on January 12-13. The program included operative clinics in the New Orleans hospitals, eye, ear, nose, and throat work and other surgical specialties.

The Richmond County Medical Society met on December 18th. Dr. Lansing Lee read a paper entitled "Hypothyroidism".

The Taylor County Medical Society met at Butler on December 12th. The members of the society were entertained at dinner, followed by the scientific program. The following guests were present: Drs. Charles C. Harrold, Charles C. Hinton, Ernest Corn, and Charles L. Ridley, all of Macon; Dr. John A. Garrard and Dr. Joseph E. Johnson, both of Roberta.

The Burke County Medical Society met at the Anthony Wayne Hotel, Waynesboro, on January 8th.

Dr. T. I. Willingham has closed his office in the Candler building, Atlanta, for six months taking special work in the St. Louis Children's Hospital, St. Louis Missouri. He will return to Atlanta in July and resume his practice in pediatrics.

The Georgia Public Health Association met at the Capitol in Atlanta on January 16th and 17th. Malaria, undulant fever, tuberculosis and syphilis, four outstanding public health problems, were the dominant subjects for discussion. Dr. Louis L. Williams, of the U. S. P. H. S. delivered an address on "The Present Status of Malaria Prevention"; Dr. Victor M. Roule, Augusta, "The Effect of Malaria Work in Richmond County"; Dr. Geo. E. Atwood, Waycross, "Observations on the Control of Undulant Fever"; Dr. M. F. Haygood, Alto, "State Wide Tuberculosis Control Program"; Dr. H. L. Akridge, Brunswick, "Specific Handling of a County Wide Syphilis Clinic"; Dr. B. V. Elmore, Rome, "Effect of Sanitary Privies in County Health Work"; Dr. T. F. Abercrombie, Atlanta, "Proposed Public Health Legislation, State and National".

Dr. H. G. Ansley, Decatur, was elected director of the DeKalb Chapter of the American Red Cross.

The Spalding County Medical Society elected officers for 1931 at its regular monthly meeting in December, as follows: Dr. H. W. Copeland, Griffin, President; Dr. D. L. Head, Zebulon, Vice-President; Dr. H. J. Copeland, Griffin, Secretary-Treasurer. Board of Cen-

sors: W. C. Miles, Chairman; K. S. Hunt, and A. H. Frye, all of Griffin. Officers were installed at a banquet on January 20th.

The Randolph County Medical Society announces that its annual clinic will be held at the Patterson Hospital, Cuthbert, on Thursday, February 5th.

Governor L. G. Hardman appointed the following members of the Association to offices mentioned, respectively: Dr. A. D. Little, Thomasville; Dr. A. D. Williams, Lawrenceville, to the State Board of Health. Dr. O. R. Styles, Bowdon, and Dr. A. G. Wortham, Roopville, Trustees for Bowdon State Normal School. Dr. P. C. Quarterman, Valdosta, Trustee for the Georgia State Woman's College. All appointments were confirmed by the Senate in extraordinary session in January.

Dr. B. B. Chandler, formerly of Athens, has removed to Gainesville and will continue the practice of medicine at his new location.

The Butts County Medical Society held its monthly meeting in the court house at Jackson on January 14th. While there are not so many practicing physicians in Butts County as in many others, the society has an excellent organization and holds regular monthly meetings.

The Fulton County Medical Society held its annual banquet at the Biltmore Hotel, Atlanta, in the evening of January 8th. Dr. T. C. Davison in his inaugural address spoke on "Advertising the Profession", in part, as follows: "Today we live in an era of advertising and salesmanship. Our commercial houses, our banks, and our quack competitors all realize the power of salesmanship and use it. We, the medical profession, who have the health, happiness, and lives of 123,000,000 people of the United States in our keeping, are still using the old-fashioned, single-barrel, muzzle-loading shotgun idea of hiding behind the so-called 'dignified profession'. The profession as a whole should be sold to the public. Our publicity committee should function constantly. This society should have health articles in the daily press as editorials from the society, at least weekly. Our bi-monthly sessions should be reported and the program published. We should ever be alert to present health ideas convincingly to the public, obtaining all publicity possible for organized medicine. We must view this question from a national standpoint, the obligations of the profession as a whole rather than as individuals. We have the greatest of all commodities to sell to the public—health—which also means happiness, prevention of illness, and of unnecessary and untimely deaths. Are we doing our duty? Decidedly no." Other officers installed were: Dr. Dan Y. Sage, President-Elect; Dr. William A. Smith, Vice-President; Dr. Howard Hailey, Secretary-Treasurer; Dr. George W. Fuller, member of the Board of Arbiters; Dr. W. Frank Wells, member of the Board of Trustees. The President announced the standing committees as follows: Library, Dr. J. C. Massee, Chairman; Dr. W. W. Young and Dr. Lila M. Bonner, Public Health, Dr.

L. G. Baggett, Chairman; Dr. Z. S. Cowan and Dr. O. O. Fanning, with Drs. J. P. Kennedy and T. F. Abercrombie. Public Policy and Legislation, Dr. J. T. Floyd, Chairman; Dr. R. G. Stephens and Dr. E. S. Byrd. Publicity, Dr. G. W. Quillian, Chairman; Dr. B. T. Beasley and Dr. L. C. Rouglin. Medical Education, Dr. Dan S. Elkin, Chairman; Dr. Trimble Johnson and Dr. Vernon Powell. Milk Commission, Dr. M. Hines Roberts, Chairman; Dr. T. L. Byrd, Dr. J. K. Fancher, Dr. T. F. Davenport, Dr. Thomas B. Gay, Dr. William Kiser, Dr. George F. Klugh, Dr. S. H. Shippey, Dr. R. M. Dickson, Dr. S. C. Redd, Dr. W. W. Anderson, Dr. J. A. Wood, and Dr. Joseph Yampolsky. Dr. Francis Carter Wood, New York City, and Dr. Sydney N. Burwell, Vanderbilt University School of Medicine, Nashville, were guests.

Dr. R. H. Fike, Atlanta, has been reappointed Superintendent of the Albert Steiner Clinic for 1931. Other members of the staff are: Dermatological Department, Dr. Jack W. Jones; Internal Medicine, Glenville Giddings and Dr. R. H. Wood; General Surgery, Dr. Dan C. Elkin, Floyd W. McRae, and Dr. William Perrin Nicolson; Gynecology, Dr. J. R. Barfield, Dr. John F. Denton, and Dr. Walter R. Holmes; Urology, Dr. Montague L. Boyd; Ophthalmology, Dr. Grady Clay; Neurological Surgery, Dr. Chas. E. Dowman; Otorhinology, Dr. J. Calhoun McDaugall; Physics, Dr. J. Harris Purks; Neurology, Dr. William A. Smith; Orthopedics, Dr. J. Lawson Thornton.

Dr. William R. Dancy, Savannah, has resumed his practice after being confined for several weeks with Brill's disease. The members of the Association are delighted that their past president is fast regaining his former good health.

OBITUARY

Dr. Wiley S. Ansley, Decatur; member; Atlanta College of Physicians and Surgeons, Atlanta, 1899; aged 58; died in a hospital, Lake City, Florida, on December 4, 1930. He was a member of a prominent family of middle Georgia. Dr. Ansley was city physician for Decatur and health officer for DeKalb county. He was a member of the Masonic church. Surviving him are his widow, four sons, Urquhart S. Ansley, a student at Emory University; Dr. Hamilton G. Ansley, Decatur; David H. and Robert B. Ansley, Decatur; one daughter, Miss Mary Park Ansley, Decatur. Funeral services were conducted from the First Presbyterian church by Rev. D. P. McGeachey and interment in the Decatur cemetery.

Dr. Maury Munnerlyn Stapler, Macon; member; Lincoln Memorial University, Medical Department, Knoxville, Tenn.; 1892; aged 61; died at his home on December 19, 1930. He was born and reared near Lake Alcyone, Florida. Dr. Stapler limited his practice to diseases of the eye, ear, nose and throat. While very efficient in the treatment of eye, nose and throat

diseases; he was unusually successful in the treatment of ear diseases. After graduating in medicine, Dr. Stapler served as an interne and practiced for a number of years in Knoxville, Tenn., and New York City, respectively. Surviving him are his widow and one son, Walter Stapler, Birmingham, Alabama. Funeral services were conducted from the residence and interment in the city cemetery.

SHOULD COD LIVER OIL BE FLAVORED?

It is a well-known fact that young infants shy at aromatics. Older patients often tire of flavored medications to the point where the flavoring itself becomes repellant. This is particularly true if the flavoring is of a volatile nature or "repeats" hours after being ingested. Physicians have frequently used the terms "fresh", "natural", "sweet", and "nut-like" in commenting upon the fine flavor of Mead's Standardized Cod Liver Oil. They find that most patients prefer an unflavored oil when it is as pure as Mead's.

Physicians who look with disfavor upon self-medication by laymen are interested to know that Mead's is one Standardized Cod Liver Oil that is not advertised to the public and that carries no dosage directions on carton, bottle or circular. Mead Johnson & Company, Evansville, Ind., U. S. A., pioneers in Vitamin Research, will be glad to send samples and literature to physicians only.

RADIUM TREATMENT OF CANCER OF THE BLADDER

In 127 cases reported on by B. S. Barringer, New York (*Journal A. M. A.*, Dec. 6, 1930), the results of radium implantation were: Of forty-five cases of papillary carcinoma, twenty-five cases, or 55.5 per cent, were controlled more than three years. Of eighty-two cases of infiltrating carcinoma, twenty-three cases, or 27.5 per cent, were controlled more than three years. The suprapubic implantation by radium has an operative mortality of between 3 and 4 per cent, while the operative removal has a mortality of between 10 and 20 per cent. If one considers that all tumors of the bladder excepting those which had extended beyond the bladder were irradiated and included in these statistics, one gets a fairly comprehensive idea of the decided superiority of radium removal to operative removal.

PATHOLOGY OF MALIGNANT BLADDER NEOPLASMS

Harold D. Caylor, Bluffton, Ind. (*Journal A. M. A.*, Dec. 6, 1930), asserts that so-called papillomas of the urinary bladder should not be considered as benign lesions but as low grade papillary epitheliomas of the bladder, for they bear the same relationship to epitheliomas of the bladder as grade 1 squamous cell epitheliomas of the lip, for example, bear to the more malignant grades of epitheliomas in this organ. The grading of bladder epitheliomas, as devised by Broders, is described, illustrated and discussed. The importance of the removal of specimens from bladder epitheliomas as a diagnostic procedure is noted.

BOOK REVIEWS AND ABSTRACTS.

BOOK REVIEWS

Nervous Indigestion, by Walter C. Alvarez, M.D., Associate Professor of Medicine, the University of Minnesota (The Mayo Foundation), Pages 297, New York, Paul B. Hoeber, Inc., 1930. Price \$3.75.

Last month this reviewer said that, "Disease and the Man" was the most delightful book he had ever encountered. At the time he had not encountered "Nervous Indigestion". It is a good sign that men like Alvarez and Draper are not ashamed to advocate again the practice of the art of medicine, provided that it is soundly grounded in the science of medicine. Alvarez is an outstanding exponent of this happy combination of art and science, and no medical author today writes more charmingly.

The thesis of this book is that there is an increasing tendency for the teacher of medicine to step from the laboratory to the professorial chair. He is therefore primarily interested in demonstrating to the student conditions that can be demonstrated and the rarer the disease the better the professor likes it. As a result of this the student enters into practice ill-equipped to handle the functional disorders, which are apt to constitute the major portion of his practice.

The first chapter, "Ways in Which Emotion Can Affect the Digestion Tract", is essentially a revision of his paper in the J.A.M.A. in 1929, but it is well worth reprinting. In "Types of Indigestion" he discusses succinctly the relation of organic disease, to indigestion. It is one of the finest things on the differential diagnosis of such conditions that has been written, and is the soul of wit. Alvarez deplores that "Many roentgenologists endear themselves to their surgical friends by making the diagnosis of appendicitis for them." He is sure that gastric ulcer can be distinguished from duodenal ulcer only by means of roentgenologic study. He emphasizes that the most valuable single factor in the diagnosis of gastro-intestinal disorders is a careful history. "Hints in regard to the Taking of a History" might well be memorized by every medical student, and read frequently by every student of clinical medicine. "The Handling of the Nervous Patient" is a little masterpiece. Other chapters are entitled "The Treatment of Nervous Indigestion", "Some Practical Points about the Physiology and Innervation of the Digestive Tract", and "Suggestions for Further Reading".

This book is adorned with quotations from many sources. These range from Sennacherib in 700 B. C. (and it is hard not to repeat that one about the effect of his renown upon the large bowels of his enemies) to Thornton Wilder in 1930. Probably however, the most delightful part of this book consists of the author's own anecdotes and philosophy.

L. M. B.

Procedure in the Examination of the Lungs—With Special Reference to the Diagnosis of Tuberculosis. By Arthur F. Kraetzer, M.D., Chief, Medical Department, New York Skin and Cancer Hospital; Instructor in Medicine, Cornell University; formerly Tuberculosis Out-Patient Department, Bellevue Hospital, and Assistant Adjunct Attending, Tuberculosis Service, Bellevue Hospital. With a foreword by James Alexander Miller, M.D., Oxford University Press, New York.

The list of contents should at once awaken the readers interest. They are as follows: The actual breath sounds, the examination of the chest, inspection, palpation, the heart in relation to pulmonary examination, percussion, auscultation, diminished intensity of breath sounds, broncho-vesicular and bronchial breath-sounds, rales, and the signs of tuberculosis.

We are living in a mechanistic age and physicians are liable to spend less time in performing a physical examination and taking a history than ever before. This book is a timely warning and gentle reminder that in diagnosing diseases of the chest, the most important findings are always those of the history and physical examination. This little book contains 125 pages of (meat). The way of the student is made easier for many questions are answered which would require many years for him to gain for himself through painful groping in a field where there is much shadow.

"The first part of the equipment necessary for the early diagnosis of tuberculosis is an unrelenting, unremitting, inexorable attitude of strong suspicion." There are no definite symptoms of tuberculosis of the lungs. Every physician in the United States should know by heart the five positive signs of pulmonary tuberculosis, any one of which should arouse suspicion and any two of which should make a tentative diagnosis. They are:

1. A positive sputum.
2. Hemoptysis of half dram or more.
3. Pleurisy with serous effusion.
4. Persistent fine moist or fine dry rales in the upper one-third of the lungs.
5. X-ray shadow of parenchymatous infiltration.

Our boldest gesture in the eradication of tuberculosis is to be found in its early diagnosis. To make an early diagnosis one has to follow the rules of the game, which are most exact.

I recommend this book most highly to the medical profession.

EVERT A. BANCKER, JR., M.D.

The Prevention of Prostatic Hypertrophy

For years prostatic massage has been found to be of value in the treatment of prostatitis and edematous conditions of the prostate. Only recently, however, has massage been advocated as a measure to prevent prostatic hypertrophy in elderly men.

Ballenger, Elder, and McDonald (Urologic and Cutaneous Review, Vol. XXXIV, No. 6, 1930), after a considerable study of clinical records and histologic-pathology of prostatic hypertrophy, reach the conclusion that the enlargement is a hyperplasia caused by an intraprostatic agent which is lessened by periodic massage of the prostate gland. Whether the benefit noted is due to the removal of the deleterious material in the expressed secretion, to improvement in the circulation or to some other cause these observers are unable to state.

Edematous prostates and beginning hypertrophy cannot be distinguished; they are regarded as essentially the same process. Both are benefited by massage, or preferably firm pressure, of the prostate. The boggy or edematous prostates appear to bridge the gap between normal prostates and those which are hypertrophied.

If employed at the beginning of hypertrophy, when the patient is voiding only two to three times at night and with only a medium amount of straining effort, it has been found that by massaging the prostate about once a week the frequency of voiding decreases, the gland becomes smaller, the stream becomes freer, the residual urine often decreases or disappears, and the likelihood of a formidable operation appears to be lessened.

Before recommending a course of prostatic massage it is advised that care be taken to exclude fibrous median bar formation or contraction of the vesical neck, carcinoma, tuberculosis, and calculus of the prostate. Especial attention should be taken to exclude median lobe enlargements which may not be palpable by rectal examination. If benefit is to be derived from this procedure, improvement usually will be noted after a few weeks of treatment. An effort has been made to recognize and treat pre-hypertrophic conditions just as pre-cancerous changes are recognized and eradicated, where possible.

Since prevention is more desirable than even a successful operation, these writers strongly advocate the trial of this plan of treatment for patients with beginning prostatic hypertrophy.

BOOKS RECEIVED

Human Anatomy—Under the Editorship of George A. Piersol, M.D., Sc.D., Professor of Anatomy in the University of Pennsylvania. The text was written by the following: Thomas Dwight, M.D., LL.D., late Parkman Professor of Anatomy in Harvard University; J. Playfair McMurrich, Ph.D., Professor of Anatomy in the University of Toronto; Carl A. Hamann, M.D., Professor of Applied Anatomy in Western Reserve University. J. William White, M.D., Ph.D., LL.D.,

Emeritus Professor of Surgery in the University of Pennsylvania. The original illustrations were drawn largely from dissections made by John C. Heisler, M. D., Professor of Anatomy in the Medico-Chirurgical College. Contains 2104 pages. Publishers: J. B. Lippincott Company, 227 South Sixth Street, Philadelphia.

UNITED STATES CIVIL SERVICE EXAMINATION

The United States Civil Service Commission announces the following open competitive examinations

MEDICAL OFFICER
ASSOCIATE MEDICAL OFFICER
ASSISTANT MEDICAL OFFICER
(General Medicine and Surgery)

Applications for the above-named positions will be rated as received by the U. S. Civil Service Commission at Washington, D. C., until June 30, 1931.

These examinations are to fill vacancies in the Department Service, Veterans' Bureau, Public Health Service, Indian Service, Coast and Geodetic Survey, and Panama Canal Service.

Competitors will not be required to report for examination at any place, but will be rated on their education and training, and on their experience.

The general requirement is that applicants must have been graduated with a degree of M. D. from a medical school of recognized standing not more than 20 years prior to the date of making oath to the application. In addition to this, for medical officer one year of hospital service and at least three years' practical experience during the last five years is required. Applicants for associate medical officer must show at least one year of hospital service, and one year of practical experience; those for assistant medical officer must have had at least one year of practical or internship.

Full information may be obtained from the United States Civil Service Commission, Washington, D. C., or from the Secretary of the United States Civil Service Board of Examiners at the post office or custom-house in any city.

PERNICIOUS ANEMIA

Raphael Isaacs and Cyrus C. Sturgis, Ann Arbor, Mich. (*Journal A. M. A.*, August 23, 1930) assert that dried, defatted hog stomach may be used as a therapeutic agent in inducing and maintaining a remission in patients with pernicious anemia. A remission may be induced with dried material (15 Gm.) corresponding to 100 Gm. of fresh stomach, and the remission may be maintained with 7 Gm. of this material. However, a safe clinical dosage is 10 Gm. for each million red blood cell deficit in the red blood cell count. The maintenance dose is 10 Gm. from five to seven times a week. So far no gross differences have been noted in the clinical features of the liver-induced remission and that after stomach therapy.

RECENT STUDIES IN UNDULANT FEVER

Hasseltine of the United States Public Health Service has recently summarized the results of his field investigations of undulant fever in the United States. The disease was recognized in every State of the Union during 1929. Epidemiologic data indicate that the cases of undulant fever as they occur in this country can be divided into three main groups: the milk group, without significant exposure to live stock or animal carcasses (mostly urban cases); the farm group, in which are included the rural cases having direct contact with live stock, and the meat group, consisting of urban cases having direct contact with live stock or carcasses. In regard to the question as to the relative pathogenicity of the types of *Brucella* organisms which may be found in raw milk, Hasseltine says: "It makes no difference whether a patient receives a bovine, porcine, or caprine type of *Brucella* through the raw milk he consumes; the fact that he contracts a preventable disease through such channels is what makes the matter of first importance." Hasseltine further says: "In cities having only a portion of their milk supply pasteurized, undulant fever has picked out the user of raw milk with as much precision as smallpox picks out the unvaccinated." Contact with infected animals, particularly with infected hogs, frequently results in infection; such cases are usually severe and sometimes fatal. The application of the agglutination test to cattle, and the segregation and ultimate elimination of those reacting positively, appears to be the logical method for eliminating the infection at its source. It is probable that only a few of the infected cows will escape detection by the agglutination test, and these will probably be found on retests of the herd. Hasseltine states that, to the health official, the greatest weakness of the procedure of examination of live stock and the elimination of infected animals is the length of time it will take to accomplish this gigantic task. For the protection of the health of the people it is necessary to rely on such measures as education of those whose occupation brings them in direct contact with infected animals, and on pasteurization to prevent milk-borne cases. It is further emphasized that examination of milk by ordinary bacteriologic methods does not reveal the presence of *Brucella* therein, as these organisms grow too slowly to appear visible in twenty-four hours. Therefore, a milk that has an exceedingly low bacterial count may be heavily contaminated with the organisms of undulant fever. Since the organism has its source in the cow's udder, no amount of cleanliness, inspection, or sterilization of utensils will be of any account unless the cow is known to be free from *Brucella* infection. Hasseltine's studies have led him to the conclusion that the pasteurization of milk renders it safe and takes care not only of undulant fever, but of all other communicable diseases transmitted by milk.—*Journal A. M. A.*, Nov. 29, 1930.

Biltmore Hotel, Atlanta, will be headquarters for the next annual session of the Association, May 12, 13, 14, 15, 1931.

GROWTH OF BONE AND DEVELOPMENT OF RICKETS

The data collected thus far by Edward Clay Mitchell and Martha V. Nelson, Memphis, Tenn. (*Journal A. M. A.*, Dec. 20, 1930), indicate that the bone growth of well fed, rapidly growing, active infants is not necessarily symmetrical during the first year of life and fails to conform to the standard conception of non-ricketic bone development. Whether this is due to the absence of a sufficient quantity of vitamin D or to the present conception of the character of ricketic bone changes is a subject for further investigation.

POLYCLINIC HOSPITAL OPENS NEW ADDITION

Seven Floors to Be Devoted to Clinics, Four to Be for Use of Private Patients

The new twelve-story addition to the New York Polyclinic Medical School and Hospital on West Fiftieth Street, constructed during the past year at a cost of more than \$1,500,000, was formally opened yesterday following a dedication luncheon sponsored by the woman's auxiliary of the institution.

The addition will provide ample ward space for teaching and also will provide additional space for clinics. Seven floors will be devoted exclusively to clinics, while four floors are designed for private patients.

The entire tenth floor of the main building has been reconstructed into seven new operating rooms and equipped with the most modern hospital facilities. A lounge and consultation room has been provided for the medical staff.

The Polyclinic was organized in 1881 and its first building was on East Thirty-fourth Street.

The new addition will increase the capacity of the hospital to about 450 patients a day and at the same time permit clinical service to more than 600 outpatients.

There are more than 350 physicians and surgeons on the staff of the institution, and more than 30,000 student doctors from all parts of the world have taken post-graduate courses in it during the fifty years of its existence.—*The New York World*, N. Y., December 30, 1930.

LABORATORY TECHNICIAN—Position wanted by young woman as laboratory technician or doctor's assistant and technician, in office or hospital. Can do all routine laboratory work such as urinalyses, feces, sputum, blood counts, malaria, Widal's test, gastric analysis, spinal fluid, Wassermann, blood chemistry, bacteriology and tissue. Best of reference. Experience in hospital and office work. Address R. C., care of the Journal of the Medical Association of Georgia.

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CHRONIC CYSTIC MASTITIS*

CHAS. C. HARROLD, M.D.
Macon

I do not wish the most efficient editor of our state journal to think that I have not read his instructions as to how to present a paper for publication. I have read it and in all probability he is right. In this case, however, I do not wish or intend to obey the law. As a matter of fact I think that there are many of us native Georgians who know the laws and yet do not obey them these days. We certainly do not obey them when visiting in Richmond County.

And so, rather than read a minute description of pathology and etiology and symptoms and treatment, and then present a few cases to illustrate certain points, I wish to reverse the process and try to present this rather difficult subject as it presents itself to the average doctor or surgeon.

Case 1.—About twenty years ago, a very good friend and colleague of mine, had me see his wife with him. At that time she was a very nervous woman of about forty, and was becoming more nervous on account of having discovered a so called "Lump in her breast". On examination the condition was rather easily diagnosed as what we called at that time "Chronic Cystic Mastitis", with a definite lumpiness in one upper quadrant and a well defined small cyst in this same quadrant. Against the opinion of my colleague I advised that the entire breast be removed, and was able to present to him for study, the opinions of various surgeons, that malignancy arose in such conditions in a percentage of cases varying from ten to fifty percent. My colleague was however very stubborn and I finally gave in and excised only that quadrant of the breast which was distinctly lumpy. It showed a small blue domed cyst with the characteristic picture of chronic cystic mastitis surrounding it as far as we exposed the area opened. A competent pathologist reported that it was a simple chronic cystic mastitis with no evidence of malignancy. There was no return of trouble and the patient lived for

fifteen years longer, and died without any recurrence.

Case 2.—Madame X, age 37, the wife of a prominent professional man in my part of the state was first seen by me in 1915. Her story was quite characteristic. She had noticed for a number of months that her breasts were not as firm as they had been, but were beginning to drop as she expressed it. She also had noticed for a number of months that they both seemed to be a little painful, and finally she had noticed a lumpiness in both of them with a very small mass in one. The lumpiness was so indefinite that I was not at first sure that it was there, but finally thought that it was present in both breasts. In one—the left—there was a distinct small cyst about the size of a peanut. I was convinced that here I had another case of chronic cystic mastitis, and so told the patient and her husband. I advised wide excision and stated that further surgery would depend on the report from the pathologist. Excision was done under ether and a very small cyst exposed. I was rather surprised to find at this time a number of small cysts present in the same quadrant. The pathologist promptly reported "chronic cystic mastitis". Two years later the woman developed a definite cancerous mass in this same breast, and although she had comparatively early operation she died in 1919 with metastases. Of course I have since then tried to believe that the occurrence of cancer in this breast was purely incidental. The family however never will believe it, and I will always be considered more or less responsible for the death of this wife and mother.

Case 3.—Madame Y, a mother of a Tech student; the mother 40 years of age and the only child eighteen. The patient was first seen by me in 1922. At that time her story was almost exactly the story as told by patient No. 2, except, that the single palpable cyst present was the size of a guinea egg, and the lumpy area surrounding it involved about one third of the breast. The cyst was definitely circumscribed and freely movable. I could feel no smaller cysts. I told this woman and her husband that I was convinced that she had no malignancy and that her trouble was what we have described as the "chronic cystic mastitis". I also told her that there were good authorities who believed that the incidence of malignancy was low and purely accidental. I told her however that I could not believe the occurrence of malignancies in diseased breasts was purely incidental and that I would not take the responsibility of excising the tumor alone. I did not believe that cancer was present and told her that I would do the simple amputation. She then asked me if I knew any surgeon who had the courage of his convictions, and who would, if he believed this

*Read before the Medical Association of Georgia, Augusta, Ga., May 15, 1930.

type of tumor not liable to become cancerous, excise the cyst and leave in the rest of the breast. I told her of such a man, she left me, went to him, had the cyst removed. The surgeon told her that the surrounding tissue was the site of chronic cystic mastitis but that there was no more danger of it becoming malignant than any normal breast. The patient came on home and has generally spread the impression among her friends that I am an alarmist.

Case 4.—Madame Z., a married woman age sixty. This case was apparently quite different from the other three described above. One breast was absolutely normal. The patient had had no children for more than twenty years and had had no trouble with either breast at any time up to a few weeks before I first saw her in 1924. At that time she had a very definite feeling of pain in one breast with a very palpable lumpy feeling in about one fourth of the breast. She herself described it as feeling like putty. The quadrant involved felt definitely nodular and a little bloody serum had escaped from the nipple. The skin was not definitely pig skin in feeling but it seemed to me that the skin certainly did not move as freely over the lumpy area as over the rest of the breast. I thought that this case was an early carcinoma and advised radical amputation. This was done, the axilla was found clean, with no enlarged glands. The specimen was sent to a very competent pathologist who reported the breasts showed no malignancy but that the entire quadrant involved showed definite chronic cystic mastitis and that it also showed a small intra-cystic papilloma which, however, was non-malignant.

Now what is this condition which has been called by the name "chronic cystic mastitis"? Of course the first question the patient asks when she is told that she has such a condition—and we see more and more such cases as the months go by, the first question the patient asks, is, "Is it cancerous or apt to become a cancer?" Now we can in the vast majority of cases answer the first half of the question by saying "No, it is not a cancer." Now the last half of the question calls for more time to answer. Let us suppose for the sake of argument that I am a very much younger doctor than I am, and that the case under consideration is case No. 1—the simplest type of all the cases mentioned. Let us suppose that I have just seen this case recently instead of twenty years ago and that I am sparring for time as we doctors so often do. I therefore tell this patient that I would like to see her during her next menstrual period when the chances are the condition will be at its worst. This gives me a chance to look up the literature before I give her definite advice. Now what advice and consolation do

I get when I go to my library. I go first to Ewing's "Neoplastic Diseases." I here find almost any kind of advice I care to take. I do not happen to own his third edition, but in his first and second editions, quoting from the second, we find such statements as the following:

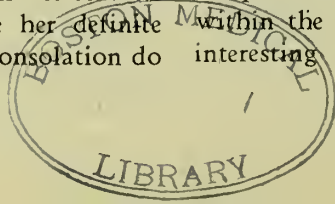
"Delbert represents a large body of surgical opinion that the affection is too benign to justify extirpation. . . . This opinion is based on the rather frequent observation that characteristic cases pursue a very chronic course without any neoplastic complication."

"Against this view stand the interpretations of Brodie, Brissaud, Sourcie, Schimmelbusch, and Saar that there are neoplastic qualities in the process, and that the step to carcinoma is short."

In the same paragraph, quoting Ewing's own opinion, he states:

"I find that a very large proportion of mammary cancers occur in breasts which are the seat of chronic mastitis." He then quotes Tietze as believing that about 10 per cent of cases of cystic mastitis developed cancer. Again quoting Ewing's own opinion he states that "In my own material about 50 per cent of the breasts excised for cystic disease show pronounced precancerous changes or miniature cancers. Very few cancerous breasts fail to show phases of chronic mastitis in the outlying portions of the parenchyma. It is therefore clear that chronic mastitis is a very important predisposing condition to mammary cancer." In the next paragraph he states "The decision to leave untouched a definite grade of cystic mastitis should be made only with the knowledge that carcinoma frequently develops in such organs. On the other hand, simple cysts often disappear spontaneously and do not constitute a definite indication for surgical interference. Yet the course of the established disease is generally progressive and most cases terminate in carcinoma or surgical removal." And with this he ends.

Cheattle of London has very different ideas as regards the general danger, and believes that practically all cases are without danger except those cases in which papillomas exist within the ducts or the cysts. In his rather interesting and comprehensive article listed



below he advises microscopic study from sections made of the entire breast. He is a firm believer in the theory that the disease which is generally called chronic cystic mastitis is no disease at all, but is a process of involution which only becomes pathological and dangerous when papillary growths occur within the ducts or acini. Here, however, he believes that they are "As full of danger to the patient as multiple adenomatous papillomas of the colon." He states that "This condition is often regarded casually as being free from danger, whereas, in reality, it is so pregnant with probable danger in all instances and positive danger in some, that when it appears most benign it should be regarded as closely allied to carcinoma as the multiple adenomatous papillomas of the colon." He closes his discussion of this phase of the subject by stating that "It is important that the condition should never be considered benign when only a part of the lesion is examined. It would be safer to remove the whole gland and its lymphatic connections than to trust to the results of a partial examination."

I think that the most masterly exposition of the subject is by Joseph McFarland of the University of Pennsylvania in the Archives of Surgery for July, 1922. This article came out just seven months after Doctor Bloodgood's most exhaustive study in the same journal. With all due and proper respect to Doctor Bloodgood, I do not believe that anyone except a trained pathologist can understand his article—while any doctor of average intelligence will find Doctor McFarland's a gem. I advise any of you who are interested—and you should all be—for every doctor except an eye man has to occasionally pass on these conditions, I advise all of you to study McFarland's work carefully. McFarland is of the opinion that many conditions have been called "Precancerous" which are in reality absolutely normal conditions of involution. His observations on the involution of the human breast after lactation, and his studies of residual lactation acini in breasts of women even as old as 84 years, is wonderfully enlightening. He firmly believes that the occurrence of malignancies in these breasts is purely accidental and that we do not know such a thing as a precancerous condition.

My own conclusions: My highest reasoning tells me that McFarland is right, and that I have in all probability removed many breasts unnecessarily.

My common sense tells me that when expert pathologists all over the world are differing on the interpretation of this condition when they have the entire breast to study under the microscope, that it is out of the question for me with my bare hands to distinguish between a small cyst with a papilloma in the duct or the acini, and a similar cyst without. I further believe that if Cheattle is right, and certain of these conditions are so potentially dangerous, that it would be far wiser to do a simple amputation in all cases where there are areas of chronic cystic mastitis. The operation is without danger, and the organ removed is useless nine times out of ten by the time a doctor sees it. The mental worry to the patient is itself worth considering. My common sense also tells me that if the best pathologists in the world differ when they have the entire breast to study, that a small frozen section studied for five minutes while the surgeon is trying to hurry the pathologist, does not help much. It may help the conscience of the surgeon and it may help to throw some bull—but as to genuine help, I seriously question it.

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DISCUSSION ON PAPER OF DR. HARROLD

Dr. William H. Myers, Savannah, Ga.—I wish to express my appreciation to Dr. Harrold for his very common sense way in handling this subject, and to say that I think his method of treatment should be adopted. His reasoning will hold good. There is no agreement, however, as to chronic cystic mastitis. This subject is really the root and branch of all breast pathology, as Boyd said. The pathology is very unusual, for there is no evidence of inflammation save the infiltration. It is not cystic, for cysts are not always present or necessary. It is not an involution, because there is hyperplasia present. None of these terms are useful. MacCarty found 147 different names to describe this condition. McFarland and Dean found 23 names to express cystic mastitis. Cheattle prefers to call it mazoplasia and says it is not a neoplasm for it is not necessary for a tumor to be present. He points out that the changes in this con-

dition, the inflammatory, neoplastic and inversion, as in goiter, may be absent. None of these are present in all cases, so we call the condition chronic cystic mastitis.

As to etiology, Keynes says that it is not bacterial, not infectious, not traumatic. He believes it is due to the chemical changes following lactation, and in the senile involution. He believes it is a keratinization of the ducts and acini, and that this irritation causes the hyperplasia.

There are many points to this question, and Bloodgood has attempted to classify this subject. He divides the cases into three groups, the first of which is the "blue dome cyst", and he has two groups that have large cysts, and five with smaller cysts, the last called Schimmelbusch's disease. He states that he has sent to pathologists throughout the country forty specimens of breast tumors, and none agreed except in two cases of malignancy, but on these two cases there was no disagreement. He makes the observation that when pathologists agree a large percentage of patients die of carcinoma, and when they disagree the patient lives.

*Dr. Charles C. Harrold, Macon, Ga. (closing).—*One thing I wish to call to your attention is the statement of McFarland, that these conditions never exist except in breasts that have lactated. That does not necessarily mean that all these women have gone to term but that there has been milk in the breast. I also understand that there will be a new article by Cheetle within the next few months, which should be of great interest. I am hoping that the American College of Surgeons will appoint a committee on breast tumors as they have on bone tumors. As Dr. Myers said, this condition is a joke at present with the numerous terms that are employed in describing it.

I thank Dr. Myers for his discussion.

SUDDEN DEATH ASSOCIATED WITH BRAIN CYSTS

Leila Charlton Knox, New York (*Jour. A. M. A.*, Dec. 13, 1930), reports five cases of brain cyst observed postmortem during the course of 2,000 consecutive autopsies including only 321 complete examinations of the skull. Three of these patients died suddenly, having been active up to a short time before death. The series includes three angiomatic cysts, with an hemangioma of the spleen; one congenital cerebral cyst associated with a cavernous angioma of the leptomeninges, and one gliomatous cyst. Attention is drawn to the fact that such cysts may be present and even be a cause of sudden death in apparently healthy persons.

ATYPICALLY SITUATED SARCOMA OF CONJUNCTIVA

Howard McIlvain Morton, Minneapolis (*Journal A. M. A.*, Dec. 13, 1930), reports a case of melanoma of the conjunctiva. The tumor was readily removed, and, apparently, without leaving involved areas. The wound healed and looked well at the end of four or five days, when the patient returned home.

SURGICAL TREATMENT OF GASTRIC AND DUODENAL ULCER*

With Respect to the Pathology Demonstrated

LON W. GROVE, M.D.
Atlanta

In discussing the surgical treatment of gastric and duodenal ulcer, we assume that there is no controversy still existing between the internist advocating medical treatment, and the surgeon advocating operative treatment. We are all agreed that there is a definite field for both, and with the possible exception of some gastric ulcers, the indications for both are fairly well established. With the exception of the cases showing definite evidence of obstruction, or threatened perforation, all ulcers should first be treated medically.

Certain anatomical and physiologic facts, many of which are of recent determination, should underly the surgical treatment of all gastric and duodenal ulcers. The surgeon of to-day should not only be an applied anatomist, but a practical physiologist and biochemist as well. There are five definite objectives to be accomplished; first, when possible, excision of the ulcer; second reduction of the emptying time of the stomach; third, quick and thorough alkalinization of the gastric juice; fourth, physiologic rest, and fifth, when feasible, removal of associated pathology. (A well planned gastroenterostomy or pyloroplasty may prove disappointing when a badly infected gall bladder or subacute appendix is allowed to remain).

A proper understanding of the physiology of the stomach and duodenum at once convinces us that no one stereotyped procedure can possibly meet the demands of surgery in correcting the various gastric and duodenal lesions. For example, while the standard gastroenterostomy can be relied upon to yield splendid results in a chronic lesion of the duodenum or pylorus producing obstruction, it often proves disappointing in the small ulcer of the pylorus or duodenum without obstruction. In the first instance, because of the obstruction, none of the gastric contents passes through the pylorus to dilute the intes-

*Read before the Medical Association of Georgia, Augusta, Ga., May 15, 1930.

tinal juices, hence, all of the alkaline fluid is delivered at the gastroenterostomy opening undiluted, thereby protecting the anastomosis against the irritating effect of the gastric juice. While in the case of the small ulcer without obstruction, a large portion of the gastric juice does pass through the pylorus, therefore the intestinal juices delivered at the gastroenterostomy opening are deficient in alkalies, hence, the gastrojejunostomy is not adequately protected against the acid gastric juices. It is in these cases that the larger percent of post-operative marginal ulcers develop. Hartrel and Petren showed that when there is no obstruction of the pylorus, the peristaltic wave is practically unchanged, and food passes both ways; and as long as the pylorus is open, the stomach empties its contents through the pylorus rather than through the gastroenterostomy.

The small ulcer on the anterior wall of the pylorus or duodenum close to the pyloric ring probably lends itself best to a modification of the Heineke-Mikulicz pyloroplasty, as described by Horsley, or the Finney pyloroplasty. By either operation we accomplish four of the five fundamentals in the treatment of gastric and duodenal ulcer, namely, excision of the lesion, reduction of the emptying time of the stomach, through alkalization of the gastric juice and physiologic rest.

A small ulcer on the posterior wall of the duodenum or pylorus, is very well controlled by a simple pyloroplasty, supplemented by cauterization of the ulcer. Dr. C. H. Mayo questions the necessity for cauterization, and thinks that these ulcers respond very nicely to the increased alkalization and physiologic rest, brought about by the pyloroplasty.

In the small ulcer on the anterior wall of the duodenum occurring farther than an inch from the pyloric ring, a simple excision followed by a transverse closure, as advocated by Judd meets the requirements. It is a simple procedure, and in Judd's experience, has been very successful.

With a small ulcer appearing more distal from the pyloric ring on the anterior wall of the duodenum or pylorus, a Finney pyloroplasty would appear to be the logical procedure. Finney has shown that following a

pyloroplasty, the acidity of the gastric juice is gradually reduced, and Hughson thinks this reduction in acidity fairly well parallels the gradual reduction of the emptying time.

Balfour in discussing the operative treatment of the small duodenal and pyloric ulcer, advises doing the simplest operation that will meet the requirements. If the simple pyloroplasty does no good, it will probably do no harm.

While ulcers of the duodenum are usually single, they may be multiple, and may occur in different segments of the duodenum. It is in this situation that neither a pyloroplasty after the method of Horsley or the Finney pyloroplasty is indicated. A gastroenterostomy will probably best meet the indications. Horsley and others have suggested that the pylorus be occluded by some method in an effort to produce, temporarily at least, an obstructive lesion of the pylorus, thereby bringing about more ideal indications for gastroenterostomy.

It will be remembered that the secretion of the pyloric glands is alkaline, hence, the fallacy of a pylorotomy advocated by some as the method of choice, in the treatment of small duodenal ulcers. Steinberg has shown that following this operation, the acidity of the stomach is not materially reduced. Besides, as a conservative estimate, this radical operation carries a mortality of at least 10 per cent, as compared to a possible 1 to 2 per cent following the simpler methods of pyloroplasty.

In the large chronic pyloric ulcer, there is usually an associated gastritis, and it is in this type of lesion that pylorotomy is more definitely indicated. It will also be remembered that it is in this portion of the stomach (the so called alkaline area) that ulcers are more prone to recur or to be multiple, hence, the added indication for pylorotomy in extensive or multiple lesions of this area. Malignant changes in the chronic ulcer, as quoted by different observers, varies from as high as 70 per cent to as low as 5 per cent. In a series of 756 cases, Balfour found that 4.1 per cent followed over a period of 7 years, died with malignancy of the stomach. Ewing explains this difference of opinion by the

difficulty of diagnosing primary cancer from chronic ulcer, at times of operation. He thinks that only 5 per cent of simple ulcers will show malignant changes. Finney thinks that possibly 85 per cent should be diagnosed by the surgeon at the time of operation, while 10 per cent will require the aid of a frozen section, and in the remaining 5 per cent a careful study of the stained specimen will be necessary. Evidence of malignant change in even 5 per cent of gastric ulcers should undoubtedly be an added indication for pylorotomy. When feasible a Billroth I after the method of Horsley or the Finney-Habberer technique appears the method of choice. As compared to the Billroth II, following the Billroth I, we have a more nearly physiologic emptying of the stomach. Finney has shown with a proper mobilization of the duodenum, this can be done in a large percentage of cases. We should appreciate, however, that no one operation should be forced beyond its limits of usefulness, hence, when the Billroth I is not possible without suture tension, some form of Billroth II should be resorted to. It has some of the same disadvantages as offered against gastroenterostomy; first, that there are certain possible complications incident to any short circuiting procedure, and second that the acid gastric juices come in direct contact with a portion of the jejunum, not accustomed to acid, and as in gastroenterostomy, marginal ulcers at times develop.

With the small ulcer on the anterior or posterior wall of the lesser curvature which calls for operation because of uncontrollable hemorrhage, a simple excision may be all that is necessary. If the lesion is of sufficient size that excision produces a deformity of the stomach, an additional gastroenterostomy or a sleeve resection will usually be necessary. Alvarez and Klein have definitely shown that most of the nervous impulses governing peristalsis originate in and are conducted along the lesser curvature of the stomach, hence, when a large ulcer on the lesser curvature is excised, the nervous mechanism of the stomach is usually sufficiently embarrassed as to seriously disturb its motor function. This will result in retention unless a subsequent gastroenterostomy is done. We have had in our own experience a case with a large ulcer on the lesser curvature which caused

such marked disturbance of motor function as to produce a filling defect of the pylorus, roentgenically resembling advanced malignancy. After excision of this ulcer, the stomach was wholly unable to empty itself, and a subsequent gastroenterostomy became necessary.

In the treatment of perforated gastric and duodenal ulcers, there still appears to be two schools, one for simple closure and the other advocating closure supplemented by gastroenterostomy. Here as in the chronic lesions, certain physiologic facts should be considered, and unless there is definite evidence of obstruction, gastroenterostomy appears contra-indicated. There is the added danger of infection, and the additional operation is time consuming. When there is definite obstruction, some form of simple pyloroplasty when feasible, would appear to be the procedure of choice. It relieves obstruction, closes the perforation, puts the pylorus at rest, and in addition is completed within the infected zone, a precaution which may be of great moment in the already poor risk.

Post-operative marginal ulcers can only be dealt with by a reparative procedure, in which the gastrojejunostomy is disconnected to be supplemented by some form of pyloroplasty when indicated.

As is true of the operative treatment, the post-operative management of gastric and duodenal ulcers, should be directed along physiologic lines. The diet should be carefully supervised over a long period, and should be of a type demanding the minimum of gastric digestion, thereby insuring the maximum of physiologic rest.

Conclusions—No stereotyped operative procedure can possibly meet the demands of gastric and duodenal surgery. There are certain anatomical and physiologic facts which must be considered if the best results are to be expected. For example, the standard gastroenterostomy has definite indications, and will yield splendid results when used in the proper case; while it will often prove very disappointing when forced beyond its limits of usefulness, where either a pyloroplasty or even a pylorectomy might yield the desired result.

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DISCUSSION ON PAPER OF DR. GROVE

Dr. J. C. Patterson, Cuthbert, Ga.—Dr. Grove is to be congratulated on his operation for ulcer of the stomach. I think our aim should be to do the operation that best meets the condition found. The things to be considered are the pathology that is present, the condition of the patient and the ability of the surgeon. My idea is that all ulcers are medical, with some acute surgical complications such as rupture or attempted rupture.

My experience with ulcer has been limited to the emergency conditions, or acute ruptures. I have had fourteen cases of acute rupture and in all of them I have done a simple closure, in a few instances cauterizing them with a simple drainage. I have had no post-operative difficulties except in the case of one patient, four months old, who developed a subphrenic abscess and died.

I think Dr. Grove is to be complimented on the practical way in which he has demonstrated these conditions to us.

Dr. E. H. Greene, Atlanta, Ga.—I enjoyed Dr. Grove's paper and think he thoroughly covered the subject. I wish to add my congratulations to those of Dr. Patterson regarding his simplified operation.

In regard to medical treatment of ulcers, I believe that duodenal ulcers should be treated medically because primary carcinoma rarely if ever occurs in this locality. In gastric ulcer we know that carcinoma occurs frequently and I do not believe any man can tell at operation whether a precancerous condition is present or not. This is brought out by the fact that Thalheimer, of New York, several years ago with Wilensky, made a study of excised ulcers which were diagnosed as being on first study but in which further study of multiple sections showed that 10 to 20 per cent were malignant. I think it is dangerous to treat gastric ulcers medically. When a medical man does attempt to treat them he should be well aware of what he is dealing with.

The essential things to remember are, first, to remove the pathology. Second, to establish a normal emptying time or increase the normal emptying if possible. When a gastro-enterostomy is done for a duodenal ulcer and the ulcer has not been removed the operation is often a failure. The gastro-enterostomy will probably work all right, and in the course of time the ulcer will either heal or be relieved to such an extent that it causes no trouble. Then food will begin to empty through the normal opening, which will irritate the long standing ulcer and again the food will return through the gastro-enterostomy, setting up a vicious circle, and the patient will come back complaining of

the same symptoms that were present before operation. I agree with Dr. Grove that this is an operation for well selected cases only.

His demonstration of the pyloroplasty I think is ideal and believe this is the operation of choice, for as long as we stick to this operation and remember the anatomy we will get better results.

In regard to ruptured ulcer, which we have to contend with so often and which I have had occasion to deal with a few times. I believe that a simple operation in which we should first close the opening, probably by a pursestring suture, will suffice; because this is a life-saving measure and later, if necessary, we can go back and do further work. If we have a desperate or complicated situation it must be handled differently.

Dr. C. H. Richardson, Jr., Macon, Ga.—There are a few definite things that I wish to mention regarding gastric and duodenal ulcer.

First, the acute, bleeding duodenal ulcer is always medical. Very rarely do these patients die of hemorrhage. The acute ulcer itself is rarely surgical, but when we come to the chronic indurated ulcer it is always surgical. In gastric ulcer this is particularly true on account of the danger of subsequent carcinoma, and in duodenal ulcer surgery is necessary because the ulcer will not heal. I think Dr. William J. Mayo says the time to operate on duodenal ulcers is after they have been cured medically nine times. The results obtained are in inverse proportion to the time the ulcer has existed. The best results are obtained in cases of obstruction.

In regard to the closure of the stoma, frequently a gastro-enterostomy allows an ulcer to heal and then the stoma closes. Perhaps later on the ulcer becomes active again and the stoma opens up. I had an example of this some time ago when a patient came in with ulcer and I found evidence of obstruction. We were about to operate when another skiagram showed that the stoma had re-opened and the symptoms improved.

One of the dangers of gastro-enterostomy is a resulting gastrojejunal ulcer, which is worse than the original condition.

As to the subtotal gastrectomy which the Germans use, I cannot agree that this radical resection is advisable.

Dr. Henry Poer, Atlanta, Ga.—I agree with the men who have spoken before me regarding the medical treatment of gastric ulcers. We must have the co-operation of the patient in following out the medical treatment. As Dr. Grove mentioned to me in conversation, the men in Chicago have these patients in bed for several weeks with nurses to carry out their orders, and thus get full benefit of medical treatment.

In regard to indications for surgery, in our experience in one of the larger cities in the country we consider of value, first, obstruction; second, chronic recurring hemorrhages, such as Dr. Richardson mentioned and not the acute hemorrhages; third, failure to improve under medical treatment.

As to how long medical treatment should be continued, I think it depends upon the cooperation of the patient, and the patient's position. The economics in the case must be considered. In the city hospital where patients are not able to pay for their care we have to consider surgery, whereas a patient in private practice might continue the medical regime for a longer time.

As to what to do by way of operation, I think first excision comes. If there is a duodenal ulcer on that side we prefer to do the Finney pyloroplasty if the ulcer is so located that we can carry out this procedure. If the Finney pyloroplasty cannot be done we consider as a second choice a subtotal gastrectomy as the most acceptable procedure, doing a Billroth II, or the one stage if necessary depending on the condition of the patient.

In regard to gastroenterostomy, we do not use the no-loop method, having had the experience in some instances of trouble at the end of about ten days when the peristaltic movements have reversed themselves. We use the isocolic method and have had no trouble.

Dr. William R. Dancy, Savannah, Ga.—Doctor Grove has given us a paper presenting the modern views relative to gastric and duodenal ulcers. He stated that the ulcer appears first and hyperacidity afterward. That may be true in many cases, but many stomachs were not normal before the gastric or duodenal ulcer appeared. In some of these cases I am quite sure that we have hyperacidity before the ulcer forms. There commonly is hyperacidity present in neurotic cases, in cases with early ptosis, and in cases of catarrh of the stomach.

Another feature I wish to mention which has not been touched upon and that is the after-treatment of these cases. It is just as essential that these patients should have the proper sort of medical supervision after operation as for them to have the operation. The etiological factors should be considered, for if the cause is not removed there will be a return of the symptoms, as the result of recurrence of the lesion.

Dr. J. C. Bennett, Jefferson, Ga.—I would like to ask what we ordinary doctors can do for these patients when they have this trouble and do not wish to be operated upon.

Dr. Lon W. Grove, Atlanta, Ga. (closing).—I appreciate the very generous discussions given this paper.

In the operation of pyloroplasty I think we have a simpler procedure than removal of the ulcer with gastroenterostomy. If there are large or multiple ulcers, this is true and a gastroenterostomy is usually the operation of choice.

When confronted with a pylorotomy, we do a Billroth I if feasible for the same reasons that we prefer a pyloroplasty in preference to a gastroenterostomy. The Billroth II is a short circuiting procedure, and the acid gastric juices is brought in direct contact with the jejunum.

I agree with Dr. Richardson in his remark relative

to the treatment of bleeding ulcers. If there is evidence of continued hemorrhage, we transfuse immediately, but if the bleeding has stopped, we prefer to wait forty-eight hours, when the transfusion is done.

With reply to Dr. Dancy's remark, I probably did not make myself clear with reference to hyperacidity. What I meant to say was that the hyperacidity is secondary to a pylorospasm regardless of its cause: whether chronic gall bladder disease, colitis, ulcer or what not. As a result of the pylorospasm, there follows gastric retention, and this subsequently produces hyperacidity.

The after treatment of these cases is very important, and they should be put under the care of a competent medical man. As is true of the operative treatment certain definite principles should be followed. They should be given a type of food which is low in protein, thereby giving the stomach physiologic rest.

As to when these patients should be turned over to the surgeon, is problematical for the reason that the diagnosis is not always easy, and too, it is very difficult to determine the exact size or extent of the ulcer. The obstructed cases should of course be referred to a surgeon immediately. This probably also holds true for the cases not responding properly to the Sippy diet. I have had two cases who nearly bled to death, while supposedly on a Sippy diet.

TABETIC ARTHROPATHIES

Arthur Steindler, Iowa City (*Journal A. M. A.*, Jan. 24, 1931), relates his observation of sixty-four cases of arthropathy involving ninety-nine joints. Of these, only two, or possibly three, were definitely non-tabetic. In three cases, a diagnosis of cerebrospinal syphilis was made, and it is possible that in these the arthropathy was an advance symptom of oncoming tabes. He discusses the etiology, pathogenesis, pathology, microscopic pathologic changes, pathologic changes disclosed by roentgen rays, symptomatology, and treatment. Of his sixty-four cases, forty-two were treated conservatively; twelve cases (fifteen joints) operatively, and ten cases were not treated. The conservative treatment consisted in alinement and support by braces or casts, and in physical therapy; i.e., massage, exercises, and muscle reduction. Of the forty-two cases conservatively treated, twenty-four improved, twelve cases showed no change or got worse, and in six cases the result of treatment remained undetermined because of the shortness of observation time. As satisfactory result was considered an arrest of the destruction in the joint and such improvement in function as would result from adequate stabilization of the joint by portative apparatus. Twelve patients, in whom fifteen joints were involved, were operated on. Of these nine joints showed improvement of function, five were not improved, and one case was undetermined.

The eighty-second annual session of the Medical Association of Georgia will be held at the Biltmore Hotel, Atlanta, May 13, 14, 15.

SUPRAPUBIC PROSTATECTOMY FOR BENIGN HYPERTROPHY*

ERNEST CORN, M.D.
LOVICK W. PIERCE, M.D.
Macon

During recent years much has been contributed to the progress of surgery of the prostate. Notwithstanding, except for a few minor refinements, the actual operative technique remains practically unchanged. It is chiefly in the preoperative treatment of the patient that the greatest improvements are noted and it is these improvements which are largely responsible for the reduction of mortality during the last few years. It is our purpose to discuss briefly the management of the prostatic, especially with regard to the preparation of the patient for suprapubic prostatectomy.

Hypertrophy of the prostate is not merely a local condition of the urinary tract but is a general medical condition involving particularly the cardio-renal-vascular system. The problem, therefore, is not only a surgical one but a medical one as well. The operation itself is but a small part in the treatment of prostatic obstruction.

Drainage of the bladder is the most important factor in the preliminary treatment. Prostatectomy should never be undertaken without some form of bladder drainage. There are two methods by which bladder drainage may be established; first, by means of suprapubic cystostomy, and second, by means of indwelling urethral catheter. Both methods are commonly employed and both have their advantages and disadvantages. It has been conclusively shown that the urethral catheter will solve the problem of bladder drainage in about 75 per cent of cases. We believe that in selected cases where only a short period of drainage is necessary the catheter drainage is ideal. By this method following the necessary period of drainage the gland is removed by a single operation. This procedure has several distinct advantages. It limits the surgical procedure to one operation. It shortens the number of hospital days for the patient. It does not keep the patient con-

fined to bed. At operation it permits better exposure of the bladder thus allowing the gland to be removed under direct vision if necessary and also permitting complete hemostasis.

The two-stage method with suprapubic drainage is reserved for those cases which are poor risks and which require prolonged period of drainage. Whichever method of drainage is chosen the preparation of the patient is the same.

These patients are of advanced age with impaired myocardium and kidneys, with arterio-sclerosis and frequently with hypertension, and the task of preparing them for operation is not always easy. Medical consultation is advisable in many cases. We have found that proper nursing is a very essential part in their treatment. To keep them comfortable and cheerful, to make them eat and take fluids, requires constant attention. They need and usually tolerate large amounts of water, the daily output should not be less than 3000 c. c. This dilutes and helps eliminate the toxic substances. Nurses who have had previous experience with these patients are desired. Homesickness is an element which must be considered. People in advanced life do not change their habits and mode of living easily and occasionally we see one of these cases who will fail to respond in the hospital but will improve miraculously in a few days at home.

Hypostatic pneumonia must be guarded against and when possible it is imperative that patients sit up in a chair at least for a while every day.

Blood chemistry is invaluable and when repeated from time to time is a sure guide to the patient's progress. At first there is almost invariably a retention of the nitrogenous products and frequently there is an increase in the blood sugar. These usually return to normal with improvement in the general condition of the patient. Occasionally if the blood sugar remains high, regulation of the diet together with small doses of insulin may be indicated.

In addition to the blood urea other renal function tests are advisable. We make a practice of doing Phenolsulphonephthalein tests on all cases. If this test is satisfactory,

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no further tests are considered necessary. But if this tests is unsatisfactory, further study of the renal function is made by means of the concentration tests.

Red blood counts and hemoglobin estimations should also be done routinely on all cases. If anemia is present transfusion before operation will often prove a life saving measure.

With regard to the circulatory system digitalization is indicated in many cases not only for its immediate effect, but also to prevent cardiac arrhythmia after operation. The blood pressure is taken at regular intervals. A stabilized blood pressure is desired before operation, as a fluctuating blood pressure is a poor prognostic sign.

Many cases show some gastro-intestinal disturbances due to the increase of blood urea. After bladder drainage is established these usually disappear. A regular diet is given unless contraindicated. The bowels are regulated by mineral oil and enemas when necessary.

There is no set length of time for these patients to undergo preliminary drainage before the operation can be performed. Each case is a law unto itself and must be handled differently. The period of drainage should be at least ten days and sometimes may last for months. Recently we had one patient who was drained by suprapubic methods for thirteen months before we and the consulting internist thought prostatectomy could be safely done.

There are certain general rules by which one may be guided in determining when operation is advisable.

1. The blood urea should be stabilized at its lowest level.
2. Renal function tests should indicate adequate renal function.
3. Blood pressure should be stabilized.
4. Infection in the urinary tract should be under control.

In addition, the general appearance of the patient should be good and he should be sleeping and eating well.

The operation itself needs no comment except that wherever possible after removal of the gland the prostatic fossa should be inspected for bleeding points and also in order

to excise any fragments of the capsule which may remain. Here the one stage operation has a distinct advantage permitting the application of those surgical principles, exposure, visibility, and accurate hemostasis. We do not use any of the various apparatuses for controlling hemorrhage but rely for hemostasis on the clamping of bleeding points and on the contraction of the prostatic fossa. Occasionally where there is a fibrous prostate, a small piece of gauze packing may be left in the fossa for twenty-four or thirty-six hours.

Ethylene gas is our choice of anesthesia for prostatectomy. Sufficient relaxation is obtained, the patient reacts quickly with a minimum amount of gastric and pulmonary disturbances. When the two stage operation is necessary, the first stage can easily be done under local anesthesia.

After operation shock and hemorrhage are the immediate dangers. The blood pressure and the pulse should be closely watched. The fluid intake and output of the patient is also carefully checked. Hiccough for several days may be annoying. Post-operative complications usually occur inversely in proportion to the thoroughness with which the patient is prepared for operation.

SUMMARY

In benign hypertrophy of the prostate, prostatectomy offers relief in 95 per cent of cases, the operative mortality being 3 to 5 per cent.

Prostatic obstruction is a medical condition as well as a surgical one and the actual operation is only a small part in the treatment.

Urethral catheter drainage followed by one stage prostatectomy is a safe method of procedure in selected cases, and has many advantages over the two stage method.

The preparation of a patient requires careful study and attention, and the mortality rate of prostatectomy depends largely upon the thoroughness of the preoperative treatment.

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DISCUSSION ON PAPER OF DR. CORN
AND DR. PIERCE

Dr. Earl Floyd, Atlanta, Ga.—The marked reduction in the mortality from prostatectomy undoubtedly is due to the very thing Dr. Corn brought out in his paper; that is, preparation of the patient for operation and particularly drainage of the bladder. It does not seem to be due so much to the type of operation, for the outcome from both methods seem to be about the same. Some glands of course can be better removed through the suprapubic route and some through the perineal, but the mortality rate is reported about the same in both procedures. It is a question of technic. Each man does his work as he best knows how and gets results.

As to drainage, it seems to be agreed that some type of drainage is necessary, either suprapubic or by indwelling ureteral catheter. The tendency seems to be toward the indwelling catheter at the present time. There is the question of hospitalization, cost, and loss of time, which are matters of grave concern to most patients. Any measure which shortens the period of hospitalization and at the same time reduces the cost, is to be desired and should be practiced.

In regard to the two-step procedure, it is right hard for me to get away from this because the men I have worked with in the past have relied so much on it. And, in the cases that require a much longer time for drainage than can be given with the indwelling catheter this procedure is better. Some patients require a considerable time to get in shape for operation. Dr. Corn's case of thirteen months reminds me of two of my own. I drained two cases suprapubically for one year before I felt they were able to stand the operation and have not regretted it.

Regarding cystoscopic examinations, I don't think it is too much on them if skillfully and quickly done with a small instrument. The determination of the amount of obstruction and protrusion into the bladder and posterior urethra is important and I am not convinced that cystoscopy has done my patients any harm.

I wish to know whether Dr. Corn does ligation of the vas. I think it a good thing and if the patient is informed that the ligation of the vas deferens does not interfere with his sexual ability he is willing to have it done.

As to the anaesthesia, I prefer spinal but evidently Dr. Corn is getting good results with ethylene or else he would not be using it.

Dr. E. G. Ballenger, Atlanta, Ga.—It was a great pleasure to listen to Dr. Corn's paper and it contained very sound advice, especially in regard to preparation of the patient for this operation. If he has had more time I am sure he would have insisted on the same post-operative care.

The satisfactory management of prostatic obstruction may be well divided into three parts of about equal importance, namely; pre-operative, operative and post-operative.

There are two points in which I disagree a little with Dr. Corn, although formerly I did exactly as he

does. Formerly we preferred general anesthesia, then spinal anesthesia and sacral; each of which was found to have certain disadvantages. Two and a half years ago we adopted local anesthesia, using a small tube to guide the needle for periprostatic infiltration.

Our earliest employment of periprostatic anesthesia was only to supplement inadequate sacral and parasacral anesthesia. In these failures we used long needles for infiltration. It was not easy, however, with the needle alone to make satisfactory injections of the periprostatic tissues especially under masses which protruded into the bladder. The difficulty experienced when using unguided needles lead us to utilize a metal tube as a shield for the needle. This tube was found to afford several advantages: it was easy to select in a systematic way areas for infiltration; the rounded end of the tube prevented trauma of the bladder or prostate; and intravesicular masses could be pressed upward so as to make injections beneath. In short, with the tube as a guide, bungling and trauma attending the injections were eliminated and the procedure was rendered easy and exact.

Another point on which I disagree, is in regard to the use of the hemostatic bag. For years we thought the hemostatic bag unnecessary; its use for six years convinced us of its value. The best way to control shock, anuria, vomiting, pneumonia, and such complications is to prevent hemorrhage.

About six years ago we made an effort to devise a less bulky bag which could be introduced or removed through the urethra without disturbing the suprapubic tube or closure. Our effort along this line was not successful, but it was found that the smaller, softer bags could be removed through the urethra and also with even less pain through a half inch suprapubic drainage tube, or through the incision. We found, furthermore, that by carrying umbilical tape or a string through the tube, bladder and urethra, at the time of the operation, that these less bulky bags could be introduced from above, when and if, late bleeding arose and this procedure could be carried out readily and with little pain.

We have found hemostatic bags far more dependable than packing with gauze.

Dr. W. L. Champion, Atlanta, Ga.—Ten or fifteen years ago I did all of my suprapubic prostatectomies in two stages. Within the past five or six years, however, they have all been done in one stage. I think the careful selection of patients, proper drainage and proper preparation of the patient for operation is important. The loss of blood is the greatest factor in increasing the mortality of prostatectomy. The way to diminish the loss of blood is to give calcium lactate for two or three days before operation, and to give parathormone the day of operation. This I am sure will decrease the mortality of this operation.

Dr. Ernest Corn, Macon, Ga. (closing).—Answering Dr. Floyd, wish to say that we do not cystoscope our prostatic patients except in selected cases. In fact

we think cystoscopy should be avoided unless the symptoms are out of proportion to the enlargement of the gland.

We rarely ever ligate the vas to prevent epididymitis in these old fellows. The epididymitis occurs in about 10 to 15 per cent of the cases and is usually very mild and responds nicely to palliative treatment.

I wish to thank the gentlemen very much for their discussion.

DIVERTICULA OF THE ESOPHAGUS* (PULSION TYPE)

Case Report

H. H. McGee, M.D.
Savannah

Esophageal diverticula are comparatively rare, but the condition is diagnosed more frequently than formerly due to the more widespread use of the roentgen ray. Carman has said that if a patient has difficulty in swallowing, a diverticulum should be looked for. The condition is rarely seen before the age of forty, and occurs more often in men than in women.

Judd reported thirty-five cases from the Mayo Clinic in 1918. Lahey reported eight cases from the Lahey Clinic in 1926. Jackson and Shallow of Philadelphia reported thirteen cases in 1925.

Esophageal diverticula may be divided into two main types (1) pulsion, and (2) traction. The main symptoms of the pulsion type are dysphagia, a regurgitation of food, and a gurgling sound in the neck. The patient usually has to eat slow, and because of the noise he makes he prefers to eat alone. If the diverticulum is large and contains much residue there may be a foul odor to the breath, and vague symptoms of indigestion. There is usually no pain unless ulceration occurs.

The traction type rarely give rise to symptoms because they are not shaped to retain food, the neck being wide and the apex high. The most common site for pulsion diverticula is at the juncture of the pharynx and esophagus, on the posterior wall. The most common site for traction diverticula is on the anterior wall near the bifurcation of the trachea. The traction is usually produced by

adhesions, which are the result of inflammatory lymph glands. Such glands are often tuberculous.

Etiology.—According to Jackson the most important factor in the etiology of pulsion diverticula is "incoordination of the cricopharyngeal pinchcock, resulting in a failure to open of the tonically closed upper end of the esophagus". The oblique fibres of the inferior constrictor propel the bolus of food downward, the orbicular fibres of the cricopharyngeus fail to relax at the proper moment, and the wall of the esophagus bulges at its weakest point, which is posteriorly; because the esophagus is supported in front by the cartilages of the larynx, and on each side by the two lobes of the thyroid gland.

Diagnosis.—When the patient is given barium to swallow, the barium can be seen to flow into the diverticulum until the sac is filled, when it flows over the top of the sac into the esophagus. The differential diagnosis between stricture and diverticulum is easy to make. At the fluoroscope in the case of a stricture the emulsion is seen to pour in a thin stream from the most dependent portion into the esophagus, which is in line with the stricture. In a diverticulum the sac fills and the emulsion then pours over the top of the sac into the esophagus, which is not in the same line as the diverticulum.

In examining a patient suspected of having a diverticulum, the screen should be raised as high as the pharynx, so as to be sure of not missing the pharyngo-esophageal type of diverticula. The patient is then examined in the antero-posterior, oblique, and lateral views, while swallowing the barium mixture.

The treatment is surgical. Most men prefer the two stage operation which is safer. Jackson and Shallow prefer the one stage operation, which they perform together. Shallow says: "The one stage operation offers the best possibility for permanent repair because in the two stage operation the repair is made in much inflammatory tissue. The two stage operation is somewhat safer, but is far less apt to effect a permanent cure. Intratracheal ether insufflation is invaluable in the operation".

I will give a brief resume of the technic of the one stage operation as performed by the

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Gaub-Jackson methods. (1) The esophagoscope is inserted and the sac cleaned by means of a suction tube. (2) An incision is made along the anterior border of the sternomastoid muscle, reaching from the level of the hyoid bone down to the sternum, cutting through skin and deep fascia, exposing the omo-hyoid muscle, which is cut transversely. The external jugular vein may have to be tied and ligated. The common carotid artery and internal jugular vein are retracted outward, and if the thyroid gland is large the superior thyroid artery may have to be ligated, allowing access to the sheath of the esophagus and trachea. With this surgical exposure completed the esophagoscopist transilluminates the sac, and raises it into the wound as it is freed from its surrounding tissues, after which it is dealt with like the sac of an ordinary inguinal hernia, namely by means of transfixation, ligation and amputation. The esophagoscope is kept in the lumen of the esophagus until the sac is removed, and three reef sutures are thrown across the site of the amputation. These reenforce the weakened portion of the gullet but do not narrow it as the esophagoscope is left in place while the sutures are being tied.

Following the operation the patient is fed thru a Rehffuss tube passed thru the nose.

Two stage operation: It was in 1909 that Goldman in Frieberg did a two stage operation, and made the surgical treatment of this condition safe. Since then there have been various modifications, among them being those made by Murphy, Judd and Lahey.

The first stage consists of freeing the sac by careful dissection and suturing the skin to the body of the sac. Second stage consists of amputating the diverticulum flush with the skin, and dissecting the mucosal layer down to the esophageal wall and amputating it.

Lahey cautions against anchoring the pouch with too much tension on the esophagus, and against dissecting the mucosal layer into the esophageal lumen. After amputating the diverticulum and mucosal layer of the neck, he packs with boric ointment strips, and allows the fistula to heal by granulation.

The most common complications of the operation for pulsion diverticula are as follows: — (L) Insufflation pneumonia,

caused by manipulating a partially filled sac. (2) Mediastinitis, due either to primary soiling, or to leakage from the site of the sac stump. (3) Secondary hemorrhage from one of the thyroid arteries exterior to the thyroid gland. (4) Esophageal fistula, or the sac may reform. (5) Recurrence of the diverticulum.

Report of Case

For six years my patient, a man, aged 44, had been complaining of vague abdominal distress, occasional spitting up of food which he had eaten several days previously (longest 4 days), a sense of tightness in the throat, foul breath, and loss of weight. He stated that he did not experience any satisfaction from eating until he had eaten a large amount of food.

The patient was referred for roentgen examination of the gastrointestinal tract, the clinical impression being duodenal ulcer. The diverticulum was discovered during the routine examination of the esophagus in such cases. On swallowing the diverticulum filled with barium first, and only a small amount passed down the esophagus until the diverticulum had become filled. The diverticulum extended posteriorly, and in the anteroposterior view was in the midline. When filled to capacity it measured 10cm. in height, and 8cm. in breadth. Fifty-four hours after the first barium meal there was still a retention in the diverticulum. The patient stated that he had regurgitated butter beans on Thursday which he had eaten the previous Sunday.

This patient was reexamined ten months after the first examination. The diverticulum was practically unchanged as to size. He had been getting salversan in the meantime, and was much improved in general health. He also stated that he thought his diverticulum must be getting smaller, as it did not bother him as much as it formerly did.

This case of pulsion diverticulum at the pharyngo-esophageal junction is of interest chiefly because of its size.

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DISCUSSION ON PAPER OF DR. McGEE

Dr. Murdock Equen, Atlanta, Ga.—I am sure that we have all enjoyed the paper by Doctor McGee, and the presentation of this rather rare case. As he has shown, there are two types of this condition, one existing high up in the throat, just at the beginning of the esophagus, the other in the region of the bifurcation of the trachea. It is interesting to note that in causation of this first type there exists a potential weakness of the esophagus at the lower part of the inferior constrictor muscles or through the weak triangle

of the posterior esophageal wall, opposite the cricoid cartilage. This is due to the absence of the longitudinal fibers, and it is at this point that the stretching and the giving way of the esophagus commences, which gradually develops into a diverticulum or hernia of the esophagus. The mechanism of this condition is the same as it would be were the hernia of inguinal, umbilical or post-operative origin.

The chief symptom of the diverticulum high up is obstruction in swallowing. In other words, the patient lives on the overflow from the diverticulum and when he swallows food he is never sure that the food will be retained. When the patient vomits food may be returned which has been eaten several hours or days before. The x-ray and the fluoroscope give us information as to the size and position of the diverticulum. If the patient is placed in the lateral position the fluoroscope will show the pouch filling with barium and then overflowing into the esophagus. Should the esophagus be squeezed between the pouch behind and the cricoid cartilage in front, the barium will be seen running in a narrow stream until the bottom of the cricoid cartilage is reached, at which point the esophagus at once becomes wider. When the patient swallows and the larynx ascends the pouch makes a similar upward excursion of about an inch.

I wish to stress the value of examining all such cases with the esophagoscope, and personally prefer to use a 9-inch oval esophagoscope, under ether. The esophagoscope enters the wide-open mouth of the pouch easily and enables one to study its interior, which is not possible by the fluoroscope or x-ray.

The advantage of having the patient anesthetized is that perfect relaxation is secured and there is less danger of perforating the esophagus by the struggling of the patient, especially is this true of patients who are hard to handle. Attention has already been called to the fact that the esophageal walls are markedly thinned and any trauma might cause a mortality.

In consideration of the treatment of this condition everything depends upon the location of the pouch and its size. If the pouch is found to be small and the examination with the esophagoscope shows that the esophagus dilates easily, the patient can be made more comfortable, and perhaps a clinical cure may be effected by the passage of graduated bougies at regular intervals. Dr. Mosher, from whom I have quoted freely in this discussion, advocates the cutting of the intervening wall between the lumen of the esophagus and the pouch. He only advocates cutting about one-third of this pouch for if more is cut a perforation of the esophagus is liable to ensue. He has found that by such a procedure his patients are able to swallow with far less difficulty and become a great deal more comfortable.

Regardless of the type of operation decided upon, the surgeon will be greatly assisted if an esophoscope has previously been introduced into the pouch, thus outlining the pouch and causing it to present on the side of the neck on which the surgeon is operating.

Dr. Robert Drane, Savannah, Ga.—It is a pleasure to hear a short paper. Dr. McGee has covered the subject, and I will review some of the older theories of causation now discarded. First we may modify the classification: traction, pulsion, traction-pulsion, and functional.

Barsony and Palgar describe small sacculations occurring in the region of a contraction during a peristaltic wave, which disappear when the wave has passed. They are purely functional. They are usually associated with some nearby lesion (duodenal ulcer).

Diverticula occur most often in those past forty. Many go so far as to say that they do not occur in the young. Jackson and Shallow report cases as follows: Congenital, juvenile, and multiple (rare).

Why should we not have diverticula in the various age groups? To my mind, they belong to the class of hernias, the diverticulum being the hernial sac, the bolus of food the "organ," and the act of deglutition the increased force, pressure.

Kyle (diseases of the nose and throat) suggests as the cause of diverticula:

1. Defective development during fetal life.
2. Imperfect growth.
3. Mechanical distention coming from a congenitally misplaced right subclavian artery.

Malformations as a cause should be more carefully considered. Piersol says they are rare. When they occur, they are usually fatal. The esophagus may be double, deficient, or absent. Usually there is an upper cul-de-sac, and a lower segment connecting with the stomach. MacLachlan and Osler report a case where the esophagus connected with the respiratory tract and skin..

Francis' theories for congenital diverticula are:

1. Analogous to the diverticula found in certain sauropsids, and in ruminant animals; that is, they represent the first two compartments of the stomach.
2. Fetal varieties, analogous to the esophageal diverticulum from which embryologically the larynx, trachea, and lungs are formed.
3. Result from a failure in the internal closure of a branchial cleft.

The above causes may be significant in congenital diverticula. The acquired are too well explained by Dr. Jackson. I accept his reasoning as final.

Dr. Jenkinson, of Chicago, in a recent article said that he found the pulsion type more frequently in the middle and lower esophagus than in the upper. Pathologists agree with him. He reported fifteen cases, not one of whom experienced dysphagia, fortunately, for these are inaccessible. These may be multiple. They are usually small. They may occur at a point where a blood vessel enters the esophagus.

The points to be learned from this paper are:

1. Diverticula do not necessarily give symptoms, and unless routinely looked for, they may be overlooked.
2. This diverticulum is the largest I have seen reported.
3. The differential diagnosis between stricture be-

nign or malignant in the upper, and cardiospasm and malignancy in the lower esophagus, and diverticula, should be easy. However, one should always exclude stricture, for the diverticulum may be secondary and superimposed above an organic lesion.

4. Zenkers diverticulum of the hypopharynx should be differentiated. It is for all purposes the same, but has its origin in the lower pharynx rather than in the upper esophagus.

5. Fluoroscopy, esophagoscopy, and surgery offer relief for a once-distressing condition.

Dr. Charles C. Hinton, Macon, Ga.—These pulsion diverticula commonly occur at the upper end of the esophagus, but occasionally are found at the lower end. I was once consulted by a woman, aged 69, who had complained of dyspepsia for fifteen years. She volunteered the information that the food regurgitated was never sour. Another point was that a bitter pill she had taken at night was spit out unchanged the next morning. These things aroused some suspicion of a diverticulum. Examination by x-ray revealed a diverticulum about 7 or 8 cm. in diameter, globular in form, resting on the diaphragm to the right of the midline. This pouch retained the barium for several hours, some of it until the next day. This lady was advised by one surgeon to be operated upon. Another surgeon examined the plates and thought it was a hernia through the diaphragm. The patient agreed with me that medical treatment was perhaps better than surgical at her age. We devised a plan of having her drink a glass of water before she ate and found that after the water filled the diverticulum she could eat her meal. She would lie on her left side and empty the diverticulum and drink another glass of water and wash it out, and then she would have no trouble. She is now 74 years old and has no trouble whatever when she follows this plan.

Dr. H. H. McGee, Savannah, Ga.—I thank the gentlemen for their discussion. Dr. Equen mentioned that the passage of a catheter is dangerous. I think it is always better to pass a string and then thread the catheter over the string, and believe if this is done there is very little danger.

In regard to the question of giving a patient ether before passing the esophagoscope, I was connected with the Jefferson Hospital, in Philadelphia, for a year, and I observed that in the Jackson clinic they used cocaine crystals for anesthesia for esophagoscopy.

In Dr. Hinton's case I think it might have been to advantage to make a differential diagnosis between hernia of the stomach and a diverticulum.

Announcement of a Cooperative Clinic Tour of Europe will appear in the March issue of THE JOURNAL. It has been organized under the collective auspices of the State Medical Journals of Iowa, Kansas, Minnesota, Georgia, West Virginia, and Wisconsin. Dr. Frederick C. Warnshuis, Speaker of the House of Delegates of the A. M. A., is Chairman.

ACCIDENTAL SEPARATION OF THE NORMALLY IMPLANTED PLACENTA*

E. CARSON DEMMOND, M.D.
Savannah

Accidental separation of the normally implanted placenta is one of the more serious complications of pregnancy. The separation may be complete or partial; the gravity of the complication varying directly with the degree of separation. The hemorrhage accompanying the separation may be apparent or concealed; the concealed type offering some diagnostic difficulties, as well as causing the obstetrician no little concern as to the best method of dealing with the complication. It is with regard to this latter condition that I wish to deal principally in this paper, as it is rather rare and I have recently had an illustrative case.

As to the etiology of accidental separation of the normally implanted placenta, the most important predisposing cause is the toxemia of pregnancy; this term being used to include both the nephritic and pre-eclamptic types. The toxemias of pregnancy cause an alteration in the blood vessels of the decidua and the placenta. Thus, the cohesive power of the placenta and the uterine wall in certain areas is in part destroyed and partial or complete separation of the placenta is made more likely. With this cohesive power diminished, anything that will produce a violent contraction of the uterine muscle may result in a separation of the placenta, in whole or in part. Sudden muscular effort, such as reaching to grasp a falling object or to keep from falling, not only causes the abdominal muscles to contract, but also the uterine muscle; this spasmodic contraction of the uterine muscle loosens the imperfectly attached placenta. Direct violence from a blow or fall may also be the cause.

The diagnosis of this condition is not difficult when there is an apparent hemorrhage. The usual history is the appearance of vaginal bleeding, associated with sustained abdominal pain, in a patient with the signs of toxemia and following some sudden muscular

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effort or after an injury. It should be borne in mind that the amount of vaginal bleeding is no indication of the extent of the actual hemorrhage, as it is the retained blood that acts as a foreign body in the uterus and causes the uterine contraction with its associated pain. In the type of separation where there is no external evidence of hemorrhage, the diagnosis is more difficult. Among the chief diagnostic points are the history of some injury or muscular effort, severe sustained abdominal pain, similar in character to a labor pain, and the presence of toxemia. The general appearance of the patient presents all signs and symptoms of loss of blood. The uterus is of boardlike consistency and may also be enlarged out of proportion to the duration of the pregnancy. The differential diagnosis includes placenta previa, ectopic gestation, ruptured uterus, ovarian cyst with a twisted pedicle, and any acute intra-abdominal condition producing symptoms of peritonitis.

The treatment of premature separation of the normally implanted placenta should be largely conservative. In those cases where there is slight external bleeding and the condition of the patient is good, watchful waiting should be the course; a great many will either cease having pains and bleeding, or go into labor spontaneously. In these cases only a small portion of the placenta is separated. With a greater degree of separation, there will be more severe pain, tetanic contraction of the uterus, and all the signs and symptoms of hemorrhage. In this type, the prompt induction of labor by means of a hydrastatic bag seems to be the most accepted form of treatment. In the worst type, the hemorrhage is concealed, the patient exhibits very severe pain, the uterus is of boardlike consistency, and all the signs of hemorrhage and shock are present. In such cases I do not believe in conservatism. DeLee and Williams estimate the mortality in this type at 50 per cent for the mother and 95 per cent for the fetus. Conservative measures are out of place in any condition carrying such a high mortality rate. The quickest method of emptying the uterus is the best treatment. The choice of method depends on whether the patient is in labor or not; and, if in labor, the degree of dilatation and the condition of

the cervix. It is of course understood that the shock and hemorrhage should be treated as well as the pathologic condition. When the accident occurs before the onset of labor, I believe Caesarean Section with removal of the uterus offers the best chance for recovery. The uterus in these cases is a menace to the life of the patient unless it is removed. The uterine musculature is infiltrated with blood, which diminishes its power to contract and its resistance against infection; and affords an excellent culture medium for pathogenic micro-organisms. If the uterus is left, postpartum hemorrhage will probably follow and, since the patient is already toxic and exsanguinated, often prove fatal.

REPORT OF CASE

A white woman, aged 35, was admitted to the Telfair Hospital, November 28, 1929. The past history was unimportant except for a six months miscarriage one year previously, at which time she was edematous; she was told she had "kidney trouble." Prior to the miscarriage she had had four normal pregnancies with healthy babies. This pregnancy was uneventful until four days prior to admission, when she noticed slight swelling of the feet and puffiness under the eyes. These symptoms increased in severity, by November 27, she was greatly swollen, had fainting spells, and felt weak. On the 28th she felt very weak and was swollen throughout, but she had no headache, vertigo, or spots before the eyes. At 9 a.m., she had a convulsion. This was followed by a severe pain which resembled a labor pain but did not disappear until an opiate had been administered. She had another convulsion at 4 p.m. All day she was drowsy, sleeping at short intervals. She was admitted to the hospital at 10 p.m. At this time she was pale and her expression was anxious and pinched. She was stuporous but, according to our informant, had had morphine. Temperature was 100, pulse 140, respiration 28, blood pressure 212/128. The heart was enlarged. Its rate was rapid, contraction forceful, giving impulse to chest wall; a systolic murmur was heard at all four areas of auscultation. The abdomen presented what appeared to be a pregnancy at term, but the uterus was of boardlike consistency and no fetal parts could be palpated and fetal heart-sounds heard. There was no loss of blood from the vagina and the cervix admitted two fingers. The extremities were markedly edematous. A catheterized specimen of urine showed four plus albumin and a large number of pus cells and casts, the casts being mainly large and small granular in type, with a few hyaline. Immediate cesarean section seemed advisable. Over the surface of the uterus there were large dark splotches of infiltrated blood, which extended under the peritoneum at the bladder fold, and under the peritoneum of the broad ligaments. Cesarean section and supra-vaginal hysterectomy was performed with no

technical difficulties. The uterus was filled with a large amount of dark clotted blood and the placenta was almost, if not entirely separated. The fetus was stillborn. The patient was given 500 cc. of 5 per cent glucose intravenously before leaving the operating room. She was then given the usual treatment for toxemia and gradually recovered. The urine cleared up rapidly, having only one plus albumin and a few casts one week after the operation. The blood pressure dropped rather slowly, being 184/90 one week after the operation. At no time during her convalescence was the temperature over 101, and that high for only three days. At the time of dismissal, 19 days after admission, her urine showed a trace of albumin, blood pressure 164/100, and her pulse was 100. Four months later she reported she was feeling perfectly well; her blood pressure 160/90, pulse 90, a specimen of urine could not be obtained.

A case was reported in the January issue of the American Journal of Obstetrics and Gynecology by Dr. Julius Kurzrock of New York, which I think it would be interesting to summarize briefly. Three days following, a fall onset with pain, vomiting, and slight bleeding from the vagina. Temperature 102, pulse 120, blood pressure 240/180. Uterus seven and one-half months, tender and boardlike. No fetal heart sounds heard. Cervix admitted two fingers and no evidence of placenta previa. Treated by the introduction of a bag and promptly delivered. Placenta free in uterine cavity and removed manually. Uterus remained soft with free bleeding. Pituitrin and gynergen administered and uterus and vagina packed with iodoform gauze. 1500 cc. of saline was given and in two hours 500 cc. of blood. There was continuous oozing through the packing. Five hours after admission the pulse was 140 and blood pressure 110/80; the uterus was soft and boggy and was repacked. Blood pressure now 70/40. 500 cc. of blood and 1000 cc. of saline under the skin was given. The next morning the patient was in coma; blood pressure 108/80, pulse 150, temperature 103. Complete suppression of urine. No bleeding since the repacking. Patient died four days post-partum. A small amount of urine obtained showed albumin and red blood cells. The autopsy finds were: Liver hemorrhagic. Uterus showed areas of hemorrhage throughout the musculature and under the peritoneum, the hemorrhage extended into the folds of the broad ligaments. In his conclusions he states that toxemia was the cause of death, although the patient's life had been threatened by hemorrhage; he also thinks the uterus was safely left in situ.

In conclusion, I would say that conservatism should be the rule in treating accidental separation of the normally implanted placenta; except when the hemorrhage is extensive or concealed. Cesarean section is then the procedure of choice, with hysterectomy if there is infiltration of the uterine musculature with blood.

DISCUSSION ON PAPER OF DR. DEMMOND

Dr. James R. McCord, Atlanta, Ga.—During the past ten years, in a series of 9,208 cases, there have been sixty-one premature separations of the placenta, according to the records of the obstetrics department for colored at Grady Hospital, or one to one hundred and fifty admissions. These have been reported by Dr. R. A. Bartholomew in the American Journal of Obstetrics and my discussion is an abstract of his publication. Of these, fifteen were severe, seven moderately severe, and thirty-nine were mild. Toxemia occurred in thirty-three cases. There were five pairs of twins. There was external hemorrhage in fifty-six cases, concealed hemorrhage in five. More or less severe shock occurred in seventeen cases.

I think that treatment can be classified about as follows:

- I. Watchful expectancy.
 1. Rupture of membranes.
 2. Use of abdominal binder, pituitrin, ergot, morphine.
 3. Glucose, intravenously or subcutaneously.
 4. Transfusion.
- II. Conservative interference.
 1. Dilating bag or catheter to induce labor.
 2. Low forceps (to hasten delivery).
 3. Breech extraction.
- III. Accouchement force.
 1. Manual dilatation of cervix.
 2. Podalic version nad extraction.
 3. Difficult forceps delivery.
 4. Cesarean section, with or without hysterectomy.

In a group of fifty-two patients under watchful expectancy one death occurred on the seventh day, due to antepartum infection.

Of five patients, four of severe type treated conservatively, labor being induced with a bag, three died. Three patients, one of whom was of a severe type, had version and extraction and all of these recovered. In one severe case the Porro operation was carried out and the patient recovered.

There was a mortality of 6.5 per cent. Excluding the antepartum infection, it was 4.9 per cent. The total fetal mortality was 83.5 per cent.

The mortality in sixty-five Cesarean sections was 22.6 per cent.

By degrees, routine conservatism in its application to the treatment of obstetric complications is gaining recognition, but this has not been the attitude toward premature separation of the placenta.

Dr. E. Carson Demmond, Savannah, Ga. (closing).—I have nothing to add. Dr. McCord has given you the statistics from a large series and I think we are in pretty good accord.

The United States Civil Service Commission announces an open competitive examination for Occupational Therapy Aide (Arts and Crafts) to be held not later than March 25th.

TULAREMIA IN GEORGIA

Report of a Fatal Case

JOSEPH C. MASSEE, M.D.
Atlanta

The lay public is quick to learn of new diseases. So in a general way the knowledge that there is a disease caused by handling infected rabbits has gotten about. That this disease is prevalent in Georgia, that it may be fatal, but can be prevented, and the methods of doing so are facts that should be given more publicity.

Tularemia occurs among rodents, particularly rabbits, as a fatal septicemia with *Bacterium Tularensis*.¹ Laboratory workers with infected animals or individuals killing, skinning, dressing, cooking or otherwise handling diseased rabbits may acquire the disease even though the skin of the hands is unbroken. In man² the disease is characterized by a protracted course of fever and debility beginning with an initial series of chills and fever and often with a granulomatous lesion at the site of inoculation. The regional lymph nodes may be enlarged and tender; occasionally they suppurate. Four per cent of cases terminate fatally, but recovery is attended by the development of immunity which lasts for many years.

The following case from the wards of the Grady Hospital illustrates the condition.

Case History

A forty-year-old produce market worker was handling rabbits. He told his wife that he had heard there was a rabbit sickness in South Georgia and that he hoped he did not get it. However, he knew no precautions and took none. On November 23, 1930, he began to suffer from fever and general malaise. On the following day he noticed a small fissure on the volar surface of the right thumb and swollen, tender right axillary lymph nodes. That day he had several chills and went to bed with a high fever. After a week of fever he was brought into the hospital where he was found to have a temperature of 104 degrees with a pulse of 120 and respirations 40 per minute. Except for a shallow, non-indurated, crusted ulcer on the volar surface of the right thumb and a large, soft, tender node in the right axilla, physical examination revealed no cause for the fever. Blood Wassermann and Widal tests were negative. Urinalysis was negative except for a trace of albumen and an occasional pus cell in a centrifuged sediment. White blood cells numbered 11,500 with 78 per cent polynuclears, 18

per cent small, and 4 per cent large mononuclears. Agglutination test for tularemia on the first day in the hospital or the eighth day of the illness was negative. On the fifteenth day of illness it was positive in a dilution of one to forty only, and on the eighteenth day it was positive in a dilution of one to three hundred and twenty. He developed physical signs of pneumonia at both bases on the fifteenth day, grew rapidly worse and died on the eighteenth day.

Autopsy and Bacteriology

The postmortem examination was performed two hours after death and revealed, in addition to the ulcer on the thumb, pneumonic consolidation in the lower lobes of both lungs in the stage of late red hepatization. The liver and spleen showed only chronic passive congestion grossly. However, microscopic study of tissues from the liver and spleen showed microscopic areas of focal necrosis in which were apparently pure cultures of a gram negative organism morphologically consistent with *bacterium tularensis*; i.e., a short gram negative bacillus. The lung specimens showed the pneumonia to be of the confluent bronchopneumonic type with numerous short gram negative bacilli imbedded in the tissue sections.

Because of the highly infectious nature of this disease the animal inoculation was done by Dr. W. C. Goodpasture, of Atlanta, who has had the disease and is therefore immune. Material from the spleen, the lungs and lesion on the thumb, respectively, was scratched into the skin of the abdomen of three guinea pigs. All three developed granulomatous ulcers at the point of inoculation. There was adjacent inguinal or axillary lymph adenopathy in each case and the animals died on the fifth, sixth, and seventh day, respectively. Each showed at autopsy characteristic multiple small white areas of focal necrosis of liver and spleen. From this material Mr. T. F. Sellers of the State Board of Health laboratory has cultured *bacterium tularensis*.

Discussion

It is said by hunters that rabbits are very scarce this year in Georgia. This may be an indication that there is an epidemic of Tularemia among them. Hunters should be warned against handling rabbits found dead or rabbits which are easily killed because of sluggishness or difficulty in running away. Market men and others handling or cleaning rabbits should wear rubber gloves. It is known that the virus of Tularemia can pass thru the unbroken skin and that passage thru animals greatly increases the virulence of the virus. Cases are recorded in which the infection followed the bite of the deer fly³ or wood ticks⁴.

In man the virulence seems diminished and no cases of transmission of the disease

from human patient to physician or nurse are on record. On the other hand, infection is very common among laboratory workers doing animal inoculations.

Four clinical types of Tularemia are recognized in man⁵:

1. The ulcero-glandular type with typical initial ulcer and regional lymph-adenopathy.

2. The glandular type without ulcer (rare).

3. The typhoid type, without surface lesion or adenopathy, running a protracted febrile course and diagnosed only by agglutination tests of blood.

4. The oculo-glandular variety, characterized by multiple conjunctival ulcers and regional lymph adenopathy.

Five years ago the State Board of Health Laboratories made no diagnoses of Tularemia in Georgia. In 1930 forty-six cases in the state were diagnosed by positive agglutination tests. These positive tests were made according to months as follows:

January	19	July	1
February	7	August	2
March	4	September	0
April	4	October	1
May	3	November	0
June	2	December	3

Considering that the diagnosis is seldom made by blood tests earlier than three weeks after infection it is apparent that most of the cases were contracted in November, December, January, and February, during the rabbit hunting season. One case is known to have been acquired from the bite of a swamp fly.

The diagnosis of Tularemia can easily be made when the agglutinins have formed in the blood and the State Board of Health laboratories are equipped to do this work. The possibility should be kept in mind in obscure febrile conditions. Animal inoculations or experimentation with diseased animals should, however, not be done by non-immune persons since infection is extremely common.

Summary

A fatal case of tularemia with autopsy is reported. Attention is called to the prevalence of the disease and instruction in prophylaxis is urged. No specific treatment for the disease is proven.

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ATLANTA—THE CONVENTION CITY OF DIXIE

An eminent historian has said that "Atlanta is the offspring of railroads". If this statement is true—and no one questions it—no more can one question that conventions have brought this infant to early maturity.

Just as the Master Builder made the gateway and the railroads came as a natural consequence, conventions have opened that gateway and people have come and raised upon the foundations laid by the early railroad pioneers a city whose drawing power is so great that it has come to be the "Convention City of Dixie".

Great convention cities do not happen—they result from a combination of many factors, chief among which are transportation, hotels, assembly halls, exhibit space, climatic conditions, recreation, entertainment, sight-seeing, each of which Atlanta offers in superabundance.

Hotels

No other city in the South is so well equipped with modern, up-to-date hotels as Atlanta; in fact, the city compares favorably with large cities of the North and East in this respect.

The Atlanta Biltmore has 560 guest rooms; Henry Grady, 500; Ansley, 400; Cecil, 312; Robert Fulton, 300; Georgian Terrace, 256; Kimball House, 400; Piedmont, 400; Imperial, 119; Aragon, 200; Winecoff, 200. The Hampton, Marion, Oliver, Pickwick, Scoville, Martinique, and many smaller hotels offer modern comforts and conveniences to guests.

Atlanta hotel service and cuisine will compare favorably with that of any city, and no hotel in the Atlanta Hotel Men's Association is permitted to boost its rates during conventions.

Recreation

Ten golf courses, three of which are eighteen-hole courses and three municipally owned, offer excellent golfing the year 'round. East Lake golf course is ranked among the ten best courses in the United States. "Bobbie" Jones and Alexa Stirling, golf luminaries, learned on this course the game that brought them fame. Brookhaven and Druid Hills are splendid courses. Piedmont Park, Candler Park, and James L. Key links are municipal nine-hole courses.

Entertainment

There need be no dull moments in "The Convention City of Dixie", for there is always something to engage one's interest.

Theatres, musical concerts, lectures, and the various church services offer a diversity of entertainment.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Association of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

FEBRUARY, 1931

**THE OPHTHALMOLOGIST AS AN
AID TO THE INTERNIST**

Progress in medicine has been brought about through scientific experiments and clinical observations and the correlation of the two. Cooperation between the research workers and the clinicians is necessary, or the patient derives no benefit therefrom.

Specialization is, after all, an aid to the internist, and closer cooperation between the two, helps both.

The first American physician to realize the importance of ocular examinations of his patients was S. Weir Mitchell and in 1874 he published his classification of headaches from an etiologic standpoint and used for the first time in the American Literature the term "eye-strain".

Bright in 1827 noted that kidney disease and dropsical effusion were often accompanied by visual disturbances, but it was not until Helmholtz gave us the Ophthalmoscope in 1851 that we were able to see the fundus pathology. Since this time the ophthalmoscope has become more and more universally used until now it is as indispensable as the sphygmomanometer in determining vascular disturbances and the prognosis. It is possible with a certain degree of accuracy to distinguish between senile vascular changes, vascular hypertension and arterio sclerosis by a fundus examination. "Angiosclerotic retinitis" (Foster Moore) and "retinitis of hypertension plus nephritis" (Benedict) may be differentiated from renal retinitis. Keith and his co-workers at the Mayo Clinic have described a new type of retinitis with a syndrome which they call "Syndrome of Malignant Hypertension".

Ocular lesions in diabetes are varied and are present in 20-30 per cent of the cases according to Martin Cohen. Retinitis is the most frequent lesion associated with diabetes

and is usually bilateral. It is often the ophthalmologist who makes the first diagnosis of diabetes.

The frequency with which the eyes act as a cause of headaches, nervousness, indigestion, asthenopia, pains in the back of the neck, etc., is well-known to most everyone, but it is surprising to see how slowly some men seek such relief for their patients, and dismiss the subject from their minds if the patient has had a recent examination of his eyes or merely purchased a pair of glasses from an optician.

Failing vision may be due to a multiplicity of conditions and should not be considered too lightly, but should be accorded the dignity of a careful examination by a competent ophthalmologist. It may be due to vascular disease, syphilis, diabetes, multiple sclerosis, as well as ocular disturbance per se.

Many eye disturbances are manifestations of constitutional conditions and likewise many remote symptoms find their origin in the eyes, so if there is closer cooperation between the internist and the ophthalmologist we will be able to render better service to our patients and get better results in our practice of the healing art.

WILLIAM O. MARTIN, JR., M.D.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.

NEW MOTHER'S DAY

Women's clubs throughout the country are to join in an appeal on Mother's Day, May 10th, to obtain adequate maternity care for mothers in the United States, according to a letter received by Mrs. John Sloane, president of the Maternity Center Association, from Saidie Orr Dunbar, chairman of the department of public welfare of the General Federation of Women's Clubs.

"We endorse the Maternity Center Association's new observance of Mother's Day," states Mrs. Dunbar, "and suggest that everywhere possible special programs and other activities be promoted by our member clubs. Any chairman desiring details may get them from the Maternity Center Association, 576 Madison Avenue, New York City."

THE AWAKENING INTEREST IN PROCTOLOGY

Much has been recently written and said about diseases of the rectum and sigmoid. What has been the cause of this rather sudden increase in interest in this particular body area and what, if any, beneficial result may we expect to come out of it?

I believe that the greatest factor in the development of this new interest is a realization on the part of many of us that this field of medicine has been too long neglected and that it should now come in for the interest to which its multiplicity of disorders entitle it. For many years the rectum has been considered by many to be a necessary but quite unesthetic anatomical evil, and as a result it has been relegated to the limbo beyond the pale of clinical interest, and only those cases where the patient almost demanded relief were given sufficient attention to provide the relief sought. The result of this has been that the irregular physician has reaped a golden harvest from these sufferers and the sign reading—"Piles cured without the knife"—has adorned the street corners in almost every city in the country. The financial success of these irregulars would not be so much a matter of concern to us if the patients had actually received the relief they were seeking, but their money and time have so often been expended with no other result than that a simple case of internal hemorrhoids has been changed by unskillful treatment into a case of severe bleeding hemorrhoids complicated by abscesses, stricture, and fistulae. The irregular physician is notoriously daring in his therapy and will try any new treatment he happens to hear of on a patient before the diagnosis has been half made. The fault allowing these conditions to exist must be laid at the feet of each of us who has been guilty of slurring over an examination or of ignoring the statement of a patient who says that he has been having a little bleeding from his rectum or a sense of slight fullness in his rectum after defecation, or some other minor symptom referable to this area.

If one will consider that the lower thirty-five to forty centimeters of the gastro-

intestinal tract can be easily and painlessly brought under the direct visual observation of the examiner and compares this with the difficulty of examination of a similar visceral extent through any other body orifice by means of a cystoscope, bronchoscope, or oesophagoscope, it would seem that when so valuable and informative an examination as a sigmoidoscopy is almost entirely devoid of danger to the patient, its elimination from the routine in a general physical examination is inexcusable. Certainly cancer of the rectum or sigmoid, diverticuli, polyps, and other benign tumors, the various types of ulceration found in the lower colon, strictures, and a wide variety of other pathological conditions can be better diagnosed and differentiated under direct vision where a biopsy section can be removed, if necessary, than by x-ray, inferential diagnosis, or any other means available to us.

The beneficial result which may be expected to follow this awakening interest in proctology is the creation of a new group of men who find their major interest in this field and therefore will give to it the time necessary for training themselves to cope with the many problems concerned in the diagnosis and relief of these conditions. Proctology is something more than the recognition of hemorrhoids and fistulae and the application of certain stereotyped therapeutic formulae in the treatment of each case. There is probably no field in medical practice in which more ingenuity is required than in proctology. Here one is dealing with a region which is very complex in its structure, extremely sensitive to pain, and subject to a wide variety of abnormal conditions. These factors require skilled treatment if the patient is to be relieved of his distress and yet retain a normally functioning sphincter muscle.

Cancer of the rectum and sigmoid is a condition which can be treated with great hopes of successful and complete eradication if treatment is instituted before local or distant metastases have occurred. The treatment of early cancer in this area compares favorably with the treatment of early breast cancer and if a sigmoidoscopy were as much a routine procedure in a general physical ex-

amination as examination of the female breast and pelvis, the mortality from inoperable malignant disease of the lower bowel would be reduced to a negligible minimum. Many of these lesions present no subjective symptoms directly referable to the bowel until the involved segment has become fixed to the surrounding tissues by malignant infiltration, but if there had been a previous sigmoidoscopic examination the tumor would have been discovered and excised before it presented an inoperable status.

Proctology can neither be said to be pure medicine nor pure surgery, but should consist of an ideal admixture of the two fields. The internist will find the explanation of some obscure cases of obstipation in rectal stricture or hypertrophy of the valves of Houston, an occasional case of infected cryptitis furnishing a focus of absorption of bacterial products and manifesting itself by involvement of remote viscera or joints, and the exact nature of the various forms of colitis may be accurately determined by direct culture of the sigmoid lesions or the gross appearance of the mucous membrane of the lower bowel. The surgeon will find rectal and sigmoid polypi, cryptitis, various types of ulcerations and abscesses, fissures, fistulae, and the varices that occur about the mucocutaneous junction at the anus. Prolapsus and mild congenital malformations often go undiscovered until adult life and there have been cases of more serious congenital malformations of the anus and rectum which have not been called to the attention of the physician until the patient contemplated marriage and then discovered that she was not as other people.

Therefore, if the awakening interest in diseases of the rectum may convince one practitioner of the value of a routine sigmoidoscopic examination in his general physical examinations, thereby enabling him to find one case of rectal cancer in an operable stage which would have otherwise gone on to inoperability, it will have justified itself and the numerous articles that have been written on this important subject will not have been without that attribute which should characterize all work in medicine, and that is the continuous effort to change the

practice of medicine from an empirical, speculative science into an exact science.

GEORGE F. EUBANKS, M.D.

STATE BOARD OF HEALTH WARNS AGAINST TULAREMIA

The following letter from the State Board of Health is particularly timely. Tularemia is increasing in Georgia and every physician should be on the lookout not only to diagnose it promptly but also to warn his patients of the dangers in handling wild rabbits. The article by Dr. J. C. Massee in this issue of the JOURNAL contains some particularly interesting and useful information on this important subject.

Atlanta, Ga., Jan. 26—If one just must have one's rabbit, then one just must, it seems.

But there are cautions and precautions if one would remain healthy and wise, according to T. F. Sellers, chief bacteriologist and director of laboratories of the State Board of Health. Just now is the time when the rabbit eating, and consequent rabbit-hunting and rabbit handling, season is at its height. It is the rabbit-handling activity of which Mr. Sellers would warn.

For there is a disease called tularemia, painful, very disagreeable and sometimes fatal, emanating from the handling of rabbits.

"During 1930, there were more than 60 cases of this malady among humans in Georgia", said Mr. Sellers. "Twenty five of these occurred last January alone.

"Some precautions we urge in handling rabbits are:
"Never handle a dead wild rabbit with your bare hands.

"Always wear rubber gloves when handling or dressing wild rabbits.

"The meat of the wild rabbit must be thoroughly cooked before being eaten. There must be no red meat or red juice near the bone.

"The hunter should kill every sickly rabbit he finds, but he should not handle the carcass or allow his dogs to eat it. Every sickly rabbit should be buried which has been thus killed and also every rabbit found dead should be buried. This will help prevent other rabbits from becoming infected.

"Every rabbit which does not jump and run off quickly when flushed should be regarded with suspicion.

"Butchers and others who dress wild rabbits for market run considerable risk of infection, due to contact with large numbers of rabbits. Such persons should wear rubber gloves of good quality free of holes or tares."

Titles for papers to be read before the next session of the Association should be submitted before March 15th. The program for the eighty-second session will be made up immediately thereafter.

HEALTH PLAY CONTEST

Another Health Play Contest open to all Junior and Senior high schools of Georgia has been announced by the Georgia Tuberculosis and Georgia Home Economics Associations. It will close May 13, 1931, so that the various communities may use their plays as a part of the Health Week program.

Last May many good plays were written and submitted in the contest.

"He Wouldn't But He Would" written by a group of pupils in the Eighth Grade at Dixie Consolidated School, Dixie, Ga., won the first prize of \$50. The second prize of \$25 went to Waycross High School—and the third prize of \$10 was won by a Home Economics class at Martin Institute, Jefferson, Ga. Honorable mention was given to Dalton High School.

The 1931 rules follow:

1. Plays must deal with some aspect of individual or community health or hygiene and run no longer than 30 minutes.

2. Plays must represent the combined efforts of a class or group of high school students. Plays written by individuals will not be accepted.

3. Submit plays to Georgia Tuberculosis Association, 282 Forrest Avenue, N.E., Atlanta, Ga., by May 13, 1931.

4. First prize—\$50 given by Georgia Tuberculosis Association; Second prize—\$25 raised by Georgia Home Economics Association; Third prize—\$10 given by Atlanta Tuberculosis Association.

The Health Play Committee—Miss Ruth Whatley, chairman, Georgia Home Economics Association, Atlanta, Ga.; Miss Mildred S. Manson, Georgia Tuberculosis Association, Atlanta, Ga.; Mrs. J. O. Martin, Georgia State Department of Education; Dr. M. E. Winchester, Georgia State Board of Health; Miss Clare Lee Cone, Home Economics Supervisor, Girl's High School, Atlanta, Ga. For further information write to the Georgia Tuberculosis Association, address above.

1931 HONOR ROLL

COUNTY SOCIETIES

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 4, 1930.
2. Butts County, Dr. Robert L. Hammond, Jackson, December 2, 1930.
3. Monroe County, Dr. G. H. Alexander, Forsyth, February 18, 1931.

*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

NEW MEMBERS FOR 1931

Adams, H. M. S., Atlanta.
 Avary, Arch, Jr., Atlanta.
 Blitch, J. R., Ellabell.
 Borders, D. J., Calhoun.
 Collins, J. J., Thomasville.
 Cornwall, Gibson K., Milledgeville.
 Cowart, J. W., Walden.
 Daniels, Chas. W., Atlanta.

Dorough, W. S., Atlanta.
 Elder, O. F., Atlanta.
 Evans, R. E., Milledgeville.
 Fike, R. H., Atlanta.
 Gostin, B. S., Macon.
 Greene, Ed H., Atlanta.
 Hines, J. H., Atlanta.
 Hope, Hollis, Atlanta.
 Hutchins, J. T., Atlanta.
 Kraft, H. N., Atlanta.
 Lake, Wm. F., Atlanta.
 Michel, H. M., Augusta.
 Middleton, D. S., Rising Fawn.
 Murdock, J. L., Emerson.
 Muse, L. H., Atlanta.
 Phillips, A. M., Macon.
 Quillian, Wiley H., Lula.
 Robinson, L. B., Atlanta.
 Rogers, J. Harry, Atlanta.
 Smith, Randolph, Atlanta.
 Smith, Wm. A., Atlanta.
 Stewart, Phil R., Atlanta.
 Ware, C. E., Atlanta.
 Wood, O. C., Milledgeville.

COUNTIES REPORTING FOR 1931

Stewart-Webster Counties Medical Society

The Stewart-Webster Counties Medical Society announces the following officers for 1931:

President—W. F. McCurdy, Weston
 Vice-President—C. S. Lynch, Lumpkin.
 Secretary-Treasurer—J. M. Kenyon, Richland.
 Censor—C. E. Pickett, Richland.

Whitfield County Medical Society

The Whitfield County Medical Society announces the following officers for 1931:

President—J. C. Rollins, Dalton.
 Vice-President—Frank Easley, Dalton.
 Secretary-Treasurer—E. O. Shellhorse, Dalton.
 Delegate—B. L. Kennedy, Dalton.
 Alternate Delegate—G. L. Broaddrick, Dalton.
 Censors—G. L. Broaddrick, H. L. Erwin and J. H. Steed.

Jenkins County Medical Society

The Jenkins County Medical Society announces the following officers for 1931:

President—M. E. Perkins, Millen.
 Vice-President—H. G. Lee, Millen.
 Secretary-Treasurer—C. Thompson, Millen.
 Delegate—Q. A. Mulkey, Millen.

Emanuel County Medical Society

The Emanuel County Medical Society announces the following officers for 1931:

President—S. S. Youmans, Oak Park.
 Vice-President—E. C. Powell, Swainsboro.
 Secretary-Treasurer—R. C. Franklin, Swainsboro.

Warren County Medical Society

The Warren County Medical Society announces the following officers for 1931:

President—H. B. Cason, Jr., Warrenton.
 Vice-President—H. T. Kennedy, Warrenton.

Secretary-Treasurer—A. W. Davis, Warrenton.
 Delegate—F. L. Ware, Warrenton.

Wilcox County Medical Society

The Wilcox County Medical Society announces the following officers for 1931:

President—L. A. Williams, Abbeville.
 Secretary-Treasurer—W. R. Googe, Abbeville.

Macon County Medical Society

The Macon County Medical Society announces the following officers for 1931:

President—C. P. Savage, Montezuma.
 Secretary-Treasurer—T. M. Adams, Montezuma.
 Delegate—T. M. Adams, Montezuma.

Taylor County Medical Society

The Taylor County Medical Society announces the following officers for 1931:

President—W. W. Edwards, Butler.
 Vice-President—S. H. Bryan, Reynolds.
 Secretary-Treasurer—R. C. Montgomery, Butler.
 Delegate—S. H. Bryan, Reynolds.
 Censors—R. C. Montgomery and S. H. Bryan.

Thomas County Medical Society

The Thomas County Medical Society announces the following officers for 1931:

President—L. L. Lundy, Boston.
 Vice President—Harry Ainsworth, Thomasville.
 Secretary-Treasurer—C. J. Reilly, Thomasville.
 Delegate—C. H. Watt, Thomasville.
 Alternate Delegate—Harry Ainsworth, Thomasville.
 Dr. C. H. Ferguson, Thomasville, new member, elected to the Board of Censors.

Wayne County Medical Society

The Wayne County Medical Society announces the following officers for 1931:

President—J. Lawton Tyre, Screven.
 Vice-President—I. K. Ogden, Odum.
 Secretary-Treasurer—A. J. Gordon, Jesup.

Bartow County Medical Society

The Bartow County Medical Society announces the following officers for 1931:

President—Tanner Lowry, Cartersville.
 Vice-President—R. E. Burton, Kingston.
 Secretary-Treasurer—A. C. Shamblin, Cartersville.
 Delegate—W. E. Wofford, Cartersville.
 Alternate Delegate—Tanner Lowry, Cartersville.
 Censors—W. C. Griffin, R. E. Burton and W. E. Wofford.

Turner County Medical Society

The Turner County Medical Society announces the following officers for 1931:

President—W. L. Story, Ashburn.
 Vice-President—F. W. Rogers, Ashburn.
 Secretary-Treasurer—J. H. Baxter, Ashburn.

Lowndes County Medical Society

The Lowndes County Medical Society announces the following officers for 1931:

President—G. T. Crozier, Valdosta.

Vice-President—J. P. Prescott, Lake Park.
 Secretary-Treasurer—Bennett G. Owens, Valdosta.
 Delegate—T. C. Williams, Valdosta.
 Alternate Delegate—A. F. Saunders, Valdosta.
 Censors—E. J. Smith, D. L. Burns, and E. P. Quillian.

Walker County Medical Society

The Walker County Medical Society announces the following officers for 1931:

President—D. W. Hammond, LaFayette.
 Vice-President—S. B. Kitchen, LaFayette.
 Secretary-Treasurer—J. H. Hammond, LaFayette.
 Delegate—H. F. Shields, Chickamauga.

WARE COUNTY MEDICAL SOCIETY

The society passed the following resolution at its January meeting in reference to compulsory liability insurance by automobile owners:

WHEREAS, The number of automobile accidents on the highways is showing an alarming increase, and

WHEREAS, The increasing number of injured persons is taxing both the medical profession and hospital facilities to the utmost to render necessary treatment, and

WHEREAS, The persons injured are frequently irresponsible, and without means to pay either for medical attention or hospital services, thereby placing an unfair burden upon them; therefore be it

RESOLVED: That this Society petition our local Legislators to introduce some comprehensive measure making the carrying of liability insurance compulsory in this State by all individuals who secure a license from the State to operate any motor vehicle within its boundaries, and be it further

RESOLVED: That copies of this resolution be sent to the editor of the JOURNAL, to the Committee on Public Policy and Legislation, and to all the County Societies with the request that they endorse it, and petition their respective legislators to aid in securing such an act.

LOCALIZING DIAGNOSIS IN BRAIN TUMOR

In a series of 183 consecutive cases of intracranial neoplasm analyzed by Charles E. Dowman and W. A. Smith, Atlanta, Ga. (*Journal A. M. A.*, Jan. 31, 1931), there were twenty-four that presented phenomena that might be misleading in localization. Among 140 cases of supratentorial tumor there were sixteen, and among forty-three cases of infratentorial tumor there were eight that presented such phenomena. Examples of such cases are (1) those cases of cerebral tumor in which bilateral or ipsilateral signs may mislead one as to the side involved; (2) cases of supratentorial tumor simulating cerebellar tumor; (3) cases of cerebellar tumor simulating a supratentorial tumor; (4) cases of cerebral tumor simulating a chiasmal lesion; (5) cases of frontal lobe tumor with homolateral fifth nerve palsy and contralateral hemianopia, and (6) cases of cerebellar tumor simulating an acoustic nerve tumor. In such cases, accessory methods of diagnosis, such as roentgenologic study and ventricular estimations, are said to be indicated.

GEORGIA STATE NURSES ASSOCIATION

Officers

President—Miss Lucia Massee, R. N., Cuthbert
 First Vice-President—Miss Dora A. Kershner, R. N., Macon.
 Second Vice-President—Mrs. Mae M. Jones, R. N., Milledgeville.
 Secretary—Miss Winnie B. Wood, R. N., Macon.
 Treasurer—Miss Jane Van De Vrede, R. N., Atlanta.
 Miss Jane Van De Vrede, R. N.
 Executive Secretary

District Presidents

First—Mrs. Dorothy Treacle, R. N., Savannah.
 Fourth—Miss Eva Chalkley, R. N., Columbus.
 Fifth—Mrs. Sue B. Paille, R. N., Atlanta.
 Sixth—Miss Dora A. Kershner, R. N., Macon
 Seventh—Miss Shirley Hamrick, R. N., Cedartown.
 Eighth—Mrs. W. C. Thurmond, R. N., Athens.
 Ninth—Miss Ruby Falls, R. N., Gainesville.
 Tenth—Mrs. Joseph Akerman, R. N., Augusta.

Headquarters

131 Forrest Avenue, N. E., Atlanta.

KEEPING FAITH

"Early in the life of modern nursing in the United States, nurses' faith in nurses caused them to band together in organized groups. Standing shoulder to shoulder, upheld by a cause greater than the individual, they have accomplished mightily, carried forward by faith in their fundamental hopes and ambitions for nursing" says Miss Janet M. Geister, Director at Headquarters of the American Nurses' Association.

"Today we are living at the close of one era and at the beginning of another. Science, invention, the inexorable drive of progress, bring us face to face with needed adjustments, newer methods, newer visions and wider hopes. The best of the old era must be retained; the best of the new adopted. In the faith of our pioneers we find beauty, inspiration, accomplishment. That faith still lives vigorously. But in the confusion of our vastly increased numbers and our more complex problems, some of us have become isolated, and we are prone to become critical of those we do not understand. Some of us have become 'class conscious', giving our greatest faith to the particular class to which we are attached—educators, administrators, public health, private duty. We are isolated from the others because we do not understand, we do not know, the hopes and hurts of each other.

"To some, adjustment to a new order brings pain; to others it brings challenge and a sense of adventure. Our faith must be broad enough to reach and enfold both these groups. It must hold sympathy, tolerance, open-mindedness and a practical desire to take

our responsibility in eliminating untoward conditions".

Membership—Why?

"What are the Benefits of Membership in the A. N. A. and the G. S. N. A.? Why should I join?" Because, first of all, of the feeling of "belonging", of comradeship, of ethical relationship to your profession, and of standing for everything that tends toward advancement, progression, higher standards and loyalty to your co-workers as well as to the public and the medical and other professions. A feeling of satisfaction that you are an integral part of the "machinery" of nursing organization which is ever reaching toward the ideal, both for nursing service and for the nurse; and lastly, for the direct and indirect benefits through contact with nursing organizations and with the leaders who are working to carry out plans laid many years ago by the pioneers in nursing—the torchbearers of the profession.

Life and progress are a succession of "stones", laid one atop the other. Success is the same. Cooperation is the composite stone which makes success of any movement or organization. Obviously, nothing can be one hundred per cent successful unless it involves participation by a potential one hundred per cent group.

In this day of impermanency, of restlessness, of change, nothing is more needed than the strength of concerted effort, of solidarity of organization. The broken link in the chain of the nursing profession is the nurse who is *not* in membership with her state and national organizations; the nurse who is *not* working shoulder to shoulder in her district

with other nurses who have perhaps gained for her many privileges and opportunities she would not otherwise have had.

Every R. N. should be a member of her state and national nursing organizations through her alumnae and district associations. She owes this to the ones who have gone before; to herself, that she may better serve her patients; to her co-workers who need her support, and to those nurses who will come after her. Each must be a roadbreaker, for no matter how far we may have traveled, the road continues on and on, and has many rough places which must be smoothed for those who follow and take our places.

At the meeting of the American Hospital Association held in New Orleans last October, interesting diagrams were exhibited by the Committee on the Grading of Nursing Schools. One was headed "Who Belong?" This illustrated the number of graduate nurses in schools who are members of the A. N. A. through state associations, and the number who are *not* members. The percentage was approximately two out of three belonging. But remember, this is only in the nursing schools contacted by the Grading Committee.

In Georgia, the situation is reversed. Only one out of a possible three nurses "belong" to the State Association and the A. N. A. In fact, on the basis of the number of R. N's in this state, it would hardly figure the one out of three. Less than a third of our R. N's. are assuming the responsibility of membership and leadership for all those who are registered to practice. This should be changed and as quickly as possible.

25th Anniversary Campaign

We are practically pledged to increase our membership 20 per cent over 1930 peak figures, according to the plan of the A. N. A., which is celebrating its 35th birthday by sponsoring a membership campaign now being conducted in all the states. But we want to do even better than this; we want to increase it 25 per cent—one per cent for every year of our existence as a State Association. And then we want to celebrate our 'victory' at the silver jubilee convention in Savannah next fall!

Miss Dora Kershner, Membership Chair-

man, wants each district and alumnae association to adopt and secure its quota of new members, as follows:

First District (Savannah).....	99
Fourth District (Columbus).....	9
Fifth District (Atlanta).....	207
Sixth District (Macon).....	27
Seventh District (Rome).....	22
Eighth District (Athens).....	7
Ninth District (Gainsville).....	5
Tenth District (Augusta).....	22

Georgia Conference of Social Work

The Georgia Conference of Social Work will hold its annual meeting in Athens, Ga., March 4th, 5th and 6th. Nurses are particularly invited to attend the morning of March 4th, when a special program has been arranged. On the morning of the 5th, a joint meeting of public health nurses, hospital superintendents and others working in the interests of the community, will take place.

INFORMATION

To our Members:

The Journal of the Medical Association of Georgia and the Cooperative Medical Advertising Bureau of Chicago maintain a service department to answer inquiries from you in reference to pharmaceuticals, surgical instruments and other manufactured products or anything you may need in your home, office, sanitarium, or hospital.

It is absolutely free and we invite you to use this service.

Perhaps you may want a certain kind of drug or instrument which is not advertised in the Journal and may not know just where to secure it most conveniently, or other things in connection with your home and practice. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in this Journal; but if they are not, we urge you to ask the Journal about them, or write direct to the Cooperative Medical Advertising Bureau, 535 North Dearborn Street, Chicago, Ill.

We want the Journal to serve you.

Books, surgical equipment and other supplies you need should be advertised in this Journal.

STATE CAPITOL

State museum containing remarkable collection of natural history and geological specimens indigenous to Georgia—almost every known ore exists in Georgia. Battle flags, legislative halls, State Supreme Court, and other things of interest. Fine view of city and surrounding hills from dome of Capitol. It is fashioned after the National Capitol at Washington, and was built in 1889. Several monuments in grounds.

WOMAN'S AUXILIARY

MEDICAL ASSOCIATION OF GEORGIA

OFFICERS

President	Mrs. Chas. C. Harrold, Macon	Recording Sec.	Mrs. J. Cox Wall, Eastman
President-Elect	Mrs. Ralston Lattimore, Savannah	Cor. Sec.	Mrs. Wm. R. Dancy, Savannah
1st Vice-Pres.	Mrs. S. T. R. Revell, Louisville	Treasurer	Mrs. Ben Bashinski, Macon
2nd Vice-Pres.	Mrs. W. W. Battey, Sr., Augusta	Parliamentarian	Mrs. A. H. Bunce, Atlanta
3rd Vice-Pres.	Mrs. J. E. Penland, Waycross	Editor	Mrs. C. W. Roberts, Atlanta

WOMAN'S AUXILIARY, MEDICAL ASSOCIATION OF GEORGIA

1930-1931

550 Orange Street, Macon, Ga.
*To the Members of Woman's Auxiliary,
Medical Association of Georgia:*

This is the first year that the Student Loan Fund is functioning with its own committee. The work that was so well begun in the year 1929-1930 is continuing along the same lines with a special committee composed of a representative from each of eleven districts. It is a regret to me that it has been impossible to get a representative from the Seventh District and I hope very much that this vacancy will be filled by the time of our annual meeting in May. At present there are four young men who are being aided by the Student Loan Fund.

I want especially to emphasize the great need of educating ourselves on the subject of health promotion and disease prevention. The best way to do this is to be a member of a county auxiliary. Women can do far more as members of an organization than by sitting at home alone and reading an occasional article. Any overlapping of the work of other organizations can always be prevented when we realize that all organizations need assistance in promoting their health programs. We as doctors' wives are the ones to give that help. We should join the Medical Auxiliary and use it as a channel through which we receive information and give it out to others. In the past year the Health Work in Georgia has suffered a decided setback—from thirty-six counties having organized health work with full-time medical officers we have dropped to twenty-eight. Some of these counties have dropped work that was being of untold advantage in the State. Not until everyone of our 161 counties have real organized health work should we as members of the Medical Auxiliary and doctors' wives feel that our help is not needed. Mrs. Ralston Lattimore of Savannah, our President-Elect, is our Chairman of Organization and Mrs. S. T. R. Revell, Louisville, Ga., is our Chairman of

Health Education. Write to them if you need their assistance.

Every auxiliary should meet regularly and in addition to the social hour when busy wives of busy doctors get together there should be an instructive program. Ask one of the members to read an article that is informing and helpful or ask one of the doctors to speak to you on some subject of common interest. There is much information available for the asking.

An interesting project of your Educational Committee is the Health Film Library. I can imagine of no better way of impressing health facts upon people than to show them pictures of various conditions. Mrs. J. A. Selden, 1102 Ridge Avenue, Macon, Ga., will be glad to hear from you.

Special Notice

State dues should be sent to Mrs. Benjamin Bashinski, 120 Buford Place, Macon, Ga. Please also send with your dues a complete list of your members and their addresses. This is important. Also please designate your officers as we are anxious to have this for our Directory.

Mrs. C. W. Roberts, 1085 St. Charles Place, N. E., Atlanta, is the Editor of our page in the State Medical Journal. Please send her anything of interest in your work; also reports of your meeting. Be sure to read our page every month in the Journal.

If there is any assistance I can give you at any time, please do not hesitate to call upon me.

With best of wishes, I am

Very Sincerely,

Helen Shaw Harrold (Mrs. C. C. Harrold)
*President, Woman's Auxiliary, Medical
Association of Georgia.*

The United States Public Health Service in a recent report states that further studies on cancer have been made during the past year. The apparent resistance to reinoculation noted in mice inoculated with a strain of mouse sarcoma was made the subject of observation, and it was determined that immunity is caused by the growth of the tumor and not by the method of treatment.

PANORAMIC VIEW OF WOMAN'S
AUXILIARY TO THE A. M. A.
IN FOUR ARTICLES

1. *The Eastern District*

MRS. W. WAYNE BABCOCK
Philadelphia, Pa.

According to the Constitution of the National Auxiliary, the first vice-president is automatically chairman of organization, the three other vice-presidents being organizers for their section of the country. Mrs. Southgate Leigh of Virginia, therefore holds this chairmanship, and the Eastern District is her particular responsibility. At her request a series of four articles is being prepared by her committee in order that each district may be cognizant of the progress of its own state's as well as those of the other three sections. The individual state journals have been generous in extreme in the space they have allowed their auxiliaries and this additional courtesy of reporting the auxiliary situation in other states is deeply appreciated, for there is a growing desire to know "what others are doing".

The New Jersey auxiliary made pilgrimages to state institutions, set apart one meeting when the mothers of physicians were entertained, and sponsored various health meetings. The Essex County auxiliary, assisted by the physicians, succeeded in establishing a course of health talks, in cooperation with the Y. W. C. A. of Newark, emphasizing especially prenatal care and information which would aid the mothers of babies and young children. Last year Mrs. James Hunter, Jr., New Jersey's State president, visited every county as did Mrs. Walter Jackson Freeman in Pennsylvania, during her presidency. One cannot help drawing the conclusion that personal contacts are necessary for county development and success.

Virginia is active in spots. The doctors encourage the auxiliaries as they believe that through them education with regard to the menace of state medicine can be spread.

Ohio for several years has been sending representatives from a few organized counties to the national meetings, but as yet there is

no state organization. As our friend and advisor, Dr. Upham, lives in Ohio, it is felt that he will advise the national auxiliary when the auspicious time arrives for the establishment of a state auxiliary.

The District of Columbia seems so completely diverted with Washington affairs that the auxiliary which so capably cared for the A. M. A. meetings some years back seems to have gone into retirement.

Delaware in a breathless, better-late-than-never manner, has completely caught up and is most interested and active and has entered upon serious work by assisting the men of the profession in establishing a medical library in Wilmington. They will cooperate with Philadelphia at the time of A. M. A. and the eastern section will introduce them with pride to the national organization. West Virginia is up and doing and you may expect still better things from that state this year.

Maine, Massachusetts, Rhode Island, Vermont, and Maryland have reported the interest of individuals but no organized effort. Queries from different localities in New York as to why there is no auxiliary, have been answered with the statement that several years ago the House of Delegates voted unanimously in favor of the auxiliary and authorized its organization. The same year Connecticut voted favorably but no definite steps have been taken.

Pennsylvania has surely discovered the rhythm in which its auxiliary work is best done, for concrete accomplishments have been turned out regularly, year by year. Of the three thousand dollars contributed last year to the Medical Benevolence Fund, more than two-thirds was contributed by the auxiliary. A definite trend toward educational meetings is felt all over the state and socially it is hoped will bring honor and glory to the Keystone State. Not only are the adult members of the auxiliary meeting, but a group of the most charming and good-looking daughters of doctors are working together in order that they may know each other and work in unison for the comfort and pleasure of the A. M. A. guests when they come to Philadelphia in May. Verily, who can question the wisdom of the auxiliary, when it

brings about so much willing work in behalf of the medical men of the country?

THE WOMAN'S AUXILIARY TO AMERICAN MEDICAL ASSOCIATION

President: Mrs. J. Newton Hunsberger, Norristown, Pa.; Chairman Press and Publicity Committee: Mrs. John O. McReynolds, Dallas, Texas; Editor: Mrs. Walter Jackson Freeman, 1507 Spruce St. Philadelphia.

Dear Auxiliary Members and Husbands:

Though I never sat at the feet of the Sage of Nancy, I must perforce join the chorus of the elect, for life in the Auxiliary "every day in every way is getting better and better."

During this last month, for example, I have received detailed reports of the annual meetings of the Virginia and Kentucky Auxiliaries, an account of a splendid Health Institute in Illinois, and a copy of Dr. Southgate Leigh's report of the Detroit convention, with its important discussions of such vital subjects as medical alcohol permits, veteran's disability allowances, state medicine, and federal subsidies for medical work by lay organizations. I have been a guest of the Southern Medical Auxiliary in Louisville, I have attended the national Board meeting in Chicago, and while there, in company with Mrs. Hunsberger and our national President-elect, Mrs. McGlothlan, I even scaled the heights of Olympus and partook of nectar and ambrosia with the gods of 535 N. Dearborn St.

Our southern Auxiliaries were first in the field, and their circle is now complete. Throughout the South what most impresses me is the great and growing interest in medical history, and here Texas again carries off the palm of priority in the person of Mrs. S. C. Red, first president of the national Auxiliary, first woman to write the medical history of a state. We welcome "The Pioneer Doctor" to our midst and wish him Godspeed and a place on every Christmas list. Proceeds from the book will be devoted to Auxiliary work.

Three southern states report histories of the Auxiliary in preparation and six are keeping scrap books.

In South Carolina, thanks to the untiring efforts of an ex-president, Mrs. H. M. Stuckey, the project of a fitting memorial to the world-renowned gynecologist, Dr. James Marion Sims, first proposed twenty years ago, was revived, and a bronze bust was unveiled in May, 1929, on the Capitol grounds at Columbia.

Kentucky history begins in the medical profession, for not Daniel Boone but a Virginia physician, Dr. Thomas Walker, was the first white man to penetrate the Cumberland Gap in 1750 and again in 1758. The State Historian's report is of thrilling interest, and already 11 of the 22 County Auxiliaries are busy collecting historical data, and some 200 medical biographies are in hand.

Kentucky is also staging a feature, to me unique—a contest for county auxiliaries, the winners to be determined by the number of credits obtained for

paid-up memberships, completion of approved study courses on the national Study Envelopes and on medical legislation, contributes to the Jane Todd Crawford memorial, *Hygeia* subscriptions, medical biographies, Auxiliary scrap books, items for the *State Medical Journal*, etc. A similar plan is proposed for District Councilors, and spirited contests seem impending.

Other important Kentucky activities include the completion of the Jane Todd Crawford Memorial Fund, the continuation of their work under the State Health Department, the study of medical legislation, and the weekly 10-minute radio talks (Louisville WLAP, Thursday, 10:50 a. m.) by members of the Jefferson County Medical Society introduced by Auxiliary members, who also choose the subjects and make all the arrangements. The Auxiliary keeps these addresses (thirty-three to date) on file for use in all kinds of meetings.

The study course on Medical and Health Laws of the State was published in *The Club Woman*, official organ of the State Federation, and some 1,000 copies have been distributed, a notable contribution. More power to Kentucky's elbow!

At the Virginia meeting special stress was laid on strengthening the developing County Auxiliary organization, and on cooperation with the State Health Department and with the Committee on Public Relations of the State Medical Society. Norfolk County, with 141 members, is the largest and most active Auxiliary. The Richmond Auxiliary assisted the Academy of Medicine in preparing a float portraying which won first prize in the parade of Adventures Day. The yellow fever investigations of Dr. Walter Reed won first prize in the parade. Plans for next year's convention include two days of meetings, the second to be devoted to round-table discussions.

Illinois next claims the center of the stage. Following the lead of the Philadelphia Auxiliary last May, the Vermilion County Auxiliary has just carried off a brilliantly successful Health Institute in Danville. There were three sessions of most valuable addresses and discussions, relieved by health movies and talks in lighter vein, and luncheon and dinner were served to all guests. These numbered about 150 at luncheon and well over 250 at dinner. I cannot do better than quote from the letter of the President, Mrs. Solomon Jones, who says in part that they were "a fine cross-section of the business and social life of our city, a marvelous representation from the civic and welfare groups—both men and women—of the schools, of the educational groups, etc., etc. Ninety-five per cent of the doctors and their wives were there. (You see, our Auxiliary numbers 83—the largest in the state.) . . . Our Commissioner of Health in this city said he had never been able to get a public health meeting—it remained for the medical Auxiliary to come along and do it. We have never had anything cause such a stir among health-minded folks."

CORINNE KEEN FREEMAN.

American Medical Association Bulletin,

Chicago, December, 1930.

BOOK REVIEWS AND ABSTRACTS.

BOOK REVIEWS

Allergic Diseases, Their Diagnosis and Treatment, by Roy M. Balyeat, M.D., M.A., F.A.C.P., Lecturer on Allergic Diseases in the University of Oklahoma Medical School and president-elect of the American Association for the Study of Allergy.

Third edition, revised and enlarged, containing 87 engravings, including four in colors. Pages 395. Published by F. A. Davis Company, Philadelphia, 1930. Price, \$5.00.

Few realize the prevalence and the economic importance of the allergic diseases. "About seven per cent of the population of the United States are sufferers from hay-fever, asthma or allied conditions". The allied conditions are hives, eczema, migraine, mucous colitis and epilepsy. Two per cent of our entire population suffer from hay-fever. It is estimated that sixty-five per cent of all hay-fever patients finally become asthmatic.

Dr. Balyeat's book is well arranged and illustrated. Every phase of the subject is discussed in the light of modern knowledge.

The following quotation from this book is most encouraging: "At present in about ten per cent of the cases that give a typical history of hay-fever or asthma we are unable to find the specific protein causing trouble, but instead of attributing the cause to bacterial infections just because there is a bacterial infection present, we are labelling them 'asthma' cause not found', or 'hay-fever, cause not found'." Although the above statistics may not show the same results in the hands of other investigators, it should stimulate us to try harder to locate the specific protein in every case of asthma and hay-fever. Dr. Balyeat's book can not be praised too highly.

E. A. BANCKER, JR., M.D.

Physical Diagnosis, by Richard C. Cabot, M.D., Professor of Clinical Medicine, Harvard University. Tenth edition, revised and enlarged, with six plates, 279 figures in the text and 529 pages. Published by William Wood & Co., New York, 1930.

A book such as this in its tenth edition needs no introduction to the medical profession. The new subject matter contained in this edition relates to coronary disease, electrocardiography, cancer of the lung, cardiac asthma, toxic hepatitis and encephalitis lethargica.

The book is most valuable to the medical student for it contains all of the essentials of physical diagnosis in brief form. The illustrations are clear and exceptionally well chosen to demonstrate the diseases described.

E. A. BANCKER, JR., M.D.

Abstracts

BISMUTH AND THE TREATMENT OF CARDIOVASCULAR SYPHILIS

Blackford (*South. M. J. Dec.*, 1930) emphasizes that the arsenicals must be used with great caution,

if at all, in the treatment of cardiovascular syphilis, and that a positive Wassermann reaction is not necessary for the diagnosis. He believes that bismuth is the drug of choice, supported by large doses of potassium iodide. He reports the results of treatment in a small series of cases that have been followed but a short time. Although the number of cases and the duration of treatment are insufficient for definite conclusions, his results appear to be encouraging in view of the gloomy prognosis in this condition. Some of the benefit derived by his edematous patients was perhaps due to the diuretic effect of the bismuth.

EVERY PHYSICIAN AN INVESTIGATOR

To doubt is desirable; not to try would be reprehensible. Every physician should be an investigator. Much of the practice of medicine becomes, by reason of its nature, an experiment. The same disease in different individuals causes different reactions, and so treatment needs constant variation to fit this individuality of our patients. Careful notes of the results of treatment of any sort can be made by any physician: this is investigation. When the accumulated data are studied critically, deductions of very considerable value may be made and important light thrown on therapeutic measures. There remains much that can be studied with very simple apparatus on patients at home as well as in hospitals. In recent years so many complex pieces of apparatus have been devised to record this or that about patients, that we are tempted to forget that the physician's five senses and a critical intelligence with very few mechanical aids are still capable of making important advances in medicine. It is well to remember that most of what we have learned in the past in medicine came from such simple methods rather than from the application of complicated apparatus. In the field of methods of treatment there is still a need of investigation. The group of self-limited diseases, as defined by Jacob Bigelow, is a very large one. The fact that scarlet fever rather recently has been removed from this group lends encouragement to the idea that others, too, may be removed by discovering methods for their cure or prevention. Many conditions that now can be ameliorated, may, by reason of investigation, be brought better under control. Many remedies, that now we use, need a better understanding of why and how they work. Many undiscovered remedies probably await the results of trial. Valuable still should be the contributions of students of medicine, who with intelligent skepticism combine thought and knowledge in the study of the many problems that confront practitioners of medicine. An intelligent skepticism assuredly is needed by practitioners now as in years past.—Henry A. Christian, M.D., in *The New England Journal of Medicine*, June, 19, 1930.

BOOKS RECEIVED

A Handbook for the Diabetic. By Albert H. Rowe, M.D., B.S., M.S., Oakland, Calif. "The education of the diabetic patient in regard to his disease and the recognized methods of its control is emphasized by Joslin as most necessary for the successful treatment and amelioration of diabetes mellitus. This is as important today as it was when Allen first introduced the present dietetic treatment of the disease". Contains 129 pages. Publishers: The Oxford University Press, 114 Fifth Avenue, New York City.

Abdomino-Pelvic Diagnosis in Women. By Arthur John Waslcheid, M.D., Director of Obstetrical and Gynecological Department of Broad Street Hospital; Director of Obstetrical and Gynecological Department of Pan-American Medical Center and Clinics, New York City; Consultant in Gynecology and Obstetrics to Margaret Hague Maternity Hospital, Jersey City, New Jersey; Consulting Gynecologist to Bergen County Hospital, Ridgewood, N. J.; Consulting Gynecologist to the F. Reuter Home, North Bergen, N. J. Contains 1000 pages with 397 illustrations. Publishers: The C. V. Mosby Co., 3523-25 Pine Boulevard, St. Louis, Mo. Price \$12.50.

The Pathology of Internal Diseases. By William Boyd, M.D., M.R., C.P., Ed., Dipl. Psych., F.R., S. C., Professor of Pathology in the University of Manitoba; Pathologist to the Winnipeg General Hospital, Winnipeg, Canada. Contains 888 pages and illustrated with 298 engravings. Publishers: Lea & Febiger, Washington Square, Philadelphia, Penn. Price \$10.

Calcium Metabolism and Calcium Therapy. By Abraham Cantarow, M.D., Assistant Demonstrator of Medicine in the Jefferson Medical College, Philadelphia. With a foreword by Hobart Amory Hare, B. Sc., M.D., LL.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia. Contains 215 pages with contents in chapters and complete index. Publishers: Lea & Febiger, Washington Square, Philadelphia, Penn. Price \$2.50.

Practical Radiation Therapy. By Ira I Kaplan, B.S., M.D., Director of the Division of Cancer, Department of Hospitals, New York City; Attending Radiation Therapist, Bellevue Hospital; Lecturer in Radiation Therapy, New York University and Bellevue Hospital Medical College; Director of the New York City Cancer Institute. With special chapter on *Applied X-Ray Physics*, by Carl B. Braestrup, B.Sc., P.E., Radiation Physicist, Division of Cancer, Department of Hospitals, New York City; Physicist to Mt. Sinai Hospital, New York City. Contains 354 pages with 227 illustrations. Publishers: W. B. Saunders Company, West Washington Square, Philadelphia, Penn. Price \$6.

Modern Surgery—General and Operative. By John Chalmers Dacosta, M.D., LL.D., F. A. C. S., Samuel D. Gross, Professor of Surgery, Jefferson Medical College, Philadelphia; Surgeon to the Jefferson Medical College Hospital; Consulting Surgeon to the Philadelphia General Hospital, St. Joseph's Hospital, and Misericordia Hospital, Philadelphia; Fellow of the American Surgical Association; Member of the Society of the Clinical Surgery; Member of the American Philosophical Society; Membre de la Societe Internationale de Chirurgie; formerly Commander U. S. N. R. F. Assisted by Benjamin Lipshutz, M.D., F. A. C. S., Surgeon to the Mt. Sinai Hospital; Associate in Neuro-Anatomy, Jefferson Medical College. Contains 1404 pages with 1050 illustrations. Publishers: W. B. Saunders Company, West Washington Square, Philadelphia, Penn. Price \$10.

Traumatotherapy—The Treatment of the Injured. By John J. Moorhead, B.Sc., M.D., Professor of Surgery and Director of the Department Traumatic Surgery, New York Post-Graduate School and Hospital; Surgical Director, Reconstruction Unit; Consulting Surgeon United States Marine; St. Mark's Nyack, New Rochelle, Yonkers General Anne May and All Soul's Hospitals; Late Lieutenant Colonel American Expeditionary Forces; Colonel Medical Officers Reserve Corps of United States Army. Contains 547 pages with 625 illustrations. Publishers: W. B. Saunders Company, West Washington Square, Philadelphia, Penn. Price \$7.

COMMUNICATIONS

*Offers Award For Research Work**To the Editor:*

The American Association for the Study of Goiter again offers an award of \$300 for the best essay based upon original research work on any phase of goiter presented at their annual meeting in Kansas City, Mo., April 7-8-9, 1931. It is hoped this offer will stimulate valuable research work, especially in regard to the basic cause of goiter.

Competing manuscripts must be in the hands of the Corresponding Secretary, J. R. Yung, M.D., Terre Haute, not later than April 1, 1931, to permit the award committee sufficient time to examine all data. Manuscripts arriving after this date will be held for the next year or returned at the author's request.

First award of the 1930 annual meeting held in Seattle was given Dr. William F. Rienhoff, Jr., of John Hopkins University, Baltimore. Doctors O. P. Kimball of Cleveland, O., E. P. and D. R. McCullagh, Cleveland, Clinic Foundation, Cleveland, O., and Robert P. Ball of the University of Louisville, received honorable mention.

The Association will greatly appreciate your giving the contents of this letter full publicity, especially among those interested in research work.

J. R. Yung, M.D., Corresponding Secretary, American Association for the Study of Goiter.
January 13, 1931, Rose Disp. Buidling, Terre Haute, Indiana.

INSURANCE SCHEME

To the Editors

We have had only two previous inquiries regarding the so-called Doctors' Life Club of the Mutual Life of America, which has its headquarters in Dallas, Texas. The first of these came in last September from an Indiana physician. At that time we attempted to learn something about it by getting a man who has had much experience in the insurance field to get together what information he could regarding the concern. In due time we received from this man a report reading as follows:

"I have been unable to find any information about the 'Mutual Life of America' or the 'Doctors' Life Club'. If you can get one of the policies and will send it to me, I will be glad to read it over and tell you whether or not, in my opinion, the contract is good if the company can show a financial statement that looks respectable. In the second paragraph of their letter, which I am returning herewith, they comment, 'beautifully lithographed policy' which the 'beneficiary will appreciate the meaning of as it *might* be the means of rendering aid at the time when most needed'.

"In order to advise you further, I am today addressing a letter to the Insurance Commissioner of Texas to determine whether or not this company is licensed to do business in Texas and in what other states they are licensed to operate in.

"This just looks to me like another one of those mail-order insurance plans, all of the work of which is done by mail. You will note that the only expeditures that are made are the time to dictate the letter and the money to pay for circularizing, a specimen policy and a blank application. After the recipient of the letter gets it, he has the whole proposition before him if he will read the policy, which he seldom does. If he does, he generally does not understand it, he does not know whether the company has any finances to back up the contract. The best advice to give to all of the members of your association is to pick out a reliable agent or broker, who knows his business."

You will note from the report that our informant was writing to the Insurance Commissioner of Texas. In due time we got another note from him, stating that he had learned that the company in question was not even licensed in the very state in which it had its headquarters.

American Medical Association

Bureau of Investigation

Chicago, Ill., January 23, 1931.

HEALTH EXAMINATION

To the Editor:

About six years ago the American Medical Association attempted to learn the nature and extent of health activities conducted by county medical societies. It is believed that there is an increasing demand from the public upon the medical profession to furnish dependable health and medical information in every form appropriate to the particular locality.

In the six years which have elapsed since our last questionnaire, many changes have transpired. The Bureau of Health and Public Instruction desires to be of the greatest assistance to every county and state society in matters pertaining to the appropriate dissemination of health and medical information. To do this to the best advantage it is necessary to know again the nature and extent of health activities that are part of every county society's annual program.

Accordingly, a questionnaire is being sent to the secretary of each of your county societies requesting that he fill in the information and return to this office at once. We wish through this letter not only to apprise you of this inquiry which is being sent into your State, but also to request that you urge your county society secretaries to return these questionnaires with the fullest and most accurate information possible. We are sure that a word from you will be very helpful in securing for us the most reliable information upon which we may base recommendations for the furtherance of this type of work.

Your judgment is, of course, best as to the manner in which you communicate with your secretaries; whether it be by means of a notice in your Journal or Bulletin, through the councilors of your districts, or by letter. We shall appreciate your assistance greatly.

R. G. LELAND, M.D., Assistant Director,
Bureau of Health and Public Instruction,
American Medical Association.

Chicago, Ill., Feb. 3, 1931.

FORMULA FOR GENERAL ANESTHETIC

I wish to give my ideas about what I think is the best and safest general anesthetic. Ether and chloroform have stood the test of time more or less favorably and are good general anesthetics, but when inhaled are unpleasant and irritate somewhat, causing nausea, vomiting, and having other bad effects and are not always safe as sometimes they cause death. The stomach is the proper place to give the general anesthetic, hence it should be empty and free from food. Three hours before give 3 grains and two hours before operation give 5 grains amytal sodium. Then give orally the following:

R Champagne, 3 ounces to 4 ounces, or quantity sufficient to make patient deeply intoxicated. If Champagne is not at hand, then it can be replaced by the following:

R Whiskey or brandy (good old brand), 3 ounces to 4 ounces

Simple Syr., 3 drachms

Cold carbonated water.

Q. S. 6 ounces.

M Shake or stir mixture. The dose of alcoholics can be repeated every 20 or 30 minutes till patient is fully under their effects, then if patient requires more relaxers give a moderate dose of ether and olive oil, by rectum.

The carbonated water with the alcoholic drinks have a good effect on the cerebral tissue. I have prescribed the above (almost the same) for general anesthesia, getting the desired result. I shall be pleased to have

the above tried out and the results reported to me. Amytal sodium has no effect on the pulse, respiration, or the blood pressure, but relieves all nervousness or mental dread. It abolishes pain, but does not stop the reflexes.

I shall report just two cases in which I have prescribed my formula for general anesthesia. A few years ago a patient with a carbuncle on the neck was given about two grains of the hypnotic about one hour before the operation, then before the operation he was given six ounces of the whiskey carbonic acid formula. While he did not get enough of the anesthetic to get fully under its effect, yet he did not complain of any pain, though there was considerable cutting and some dissection made.

December 31, 1930, a patient had a large molar tooth extracted. He was given two grains amytal sodium two hours before the extraction, then he was given about four ounces of the whiskey carbonic acid formula, also a local anesthetic. The extraction was painless.

J. M. WHITE, M.D.,
Box 59,
Montgomery, Ala.

CRAWFORD W. LONG MEMORIAL HOSPITAL AND CLINIC

To The Editor:

In the next few days you will notice an article in the lay press of a great change in Davis-Fischer Sanatorium. This will apply especially to a change of name and some of its policies. The name Davis-Fischer Sanatorium will be discontinued. A charter has been obtained for a hospital to be conducted in the name of Crawford W. Long Memorial Hospital & Clinic, which will succeed the present institution. This change you must know comes after much thought and consideration. Dr. Davis' health is such that it is impossible for him to continue in the work. The writer is looking to the future of the institution and its usefulness. While we are, we hope, pardonably proud of what we have been able to accomplish, we are most appreciative for the cooperation of the entire profession, and fully realize without this our success could not have been attained.

With the above in view, we are attempting to establish an institution as a monument to Crawford W. Long. We are not unmindful of the great honor we are claiming in hoping to establish such an one, and one that will live on and on, and its usefulness grow as it should and be unlimited.

Appreciating the financial depression of the country and the needs of the people, we are making a reduction in the hospital charges, which will be from 10 to 15 per cent of the room rates, wards, etc., throughout the entire institution, with the exception of the higher priced rooms. In the establishment of this institution it is the hope and purpose of those concerned to conduct a pay, or part pay, clinic, the hospital and clinic to be conducted especially for the benefit of the man of modest means.

The writer, together with Dr. Davis, wishes to

express to you appreciation for the support you have given, for the help you have been, and to assure you of our efforts as in the past for the best interests of humanity, the profession and medicine, and bespeak your continued support and sympathies.

Davis-Fischer Sanatorium,
L. C. Fischer, M. D.
Secretary-Treasurer.

NEWS ITEMS

The New York Polyclinic Medical School and Hospital, New York City, announces the appointment of Doctor Frederick M. Allen as Professor of Internal Medicine (Metabolism) and Doctor Everett M. Hawks as Professor of Gynecology and Obstetrics.

The annual meeting of the Emanuel County Medical Society was held on December 23, at Swainsboro. Officers were elected for 1931. A resolution was passed thanking Dr. Haygood, of Alto, and Miss White for the very efficient manner in which the Diagnostic Tuberculosis Clinic was conducted in Emanuel County. Meetings will be held bi-monthly at Franklin's Sanitarium during the year.

The Wilcox County Medical Society met at Abbeville on January 1. Dr. William R. Googe, Abbeville, read a paper entitled "Serum Therapy". The paper was discussed by a number of the members. Officers were elected for 1931. After the scientific and business meeting adjourned, the members were entertained at dinner in the Central Hotel.

The Georgia Medical Society, Savannah, held its monthly meeting on January 13. Dr. T. J. Charlton, Savannah, read a paper entitled "Massive Atelectasis Associated with Aneurism of the Aorta"; Dr. H. L. Skinner, Savannah, "Laminectomy for Bullet Wound of Spine—Presentation of Cases"; Dr. M. J. Epling, Savannah, "Fusion Operation for Paralytic Foot".

The annual Congress on Medical Education, Medical Licensure and Hospitals was held under the auspices of the American Medical Association at the Palmer House, Chicago, on February 17, 18, 19.

Dr. Joe. P. Bowdin, Deputy Commissioner of Health for the State, Atlanta, announced that there were four thousand midwives practicing in Georgia on January 1. When the Medical Association of Georgia asked that the supervision of midwives be taken up by the State Board of Health, there were 9,000 in the State. During the past year nurses from the State Board of Health gave instruction to 3,279 midwives and gave continuing licenses to 1,139.

The State Board of Health has added an automobile unit equipped with a complete x-ray outfit. It has excellent facilities for developing plates and interpreting photographs.

Dr. W. Frank Wells, Atlanta, has been elected President of the Fulton County Board of Health.

The Physicians and Surgeons Association of the Georgia and Florida Railroad held its annual meeting

in Douglas on January 15. Dr. A. S. M. Coleman, Douglas, President, presided.

The Macon County Medical Society met at Montezuma on January 7. Officers were elected for 1931.

Dr. J. R. Wilson, formerly of Patterson, has moved to Jesup.

Dr. Geo. E. Atwood, Waycross, has been elected to membership in the International Society of Medical Health Officers.

The Ware County Medical Society met at the home of Dr. Geo. E. Atwood, Waycross, on January 8. Dr. M. E. Winchester, Director of County Health Work of the State Board of Health was the principal speaker. He outlined plans for dividing the state into fifty health districts. Dr. and Mrs. Atwood entertained the members at an oyster supper.

The Bartow County Medical Society met at the offices of Dr. T. Lowry, Cartersville, on January 7.

Dr. A. H. Frye, Griffin, entertained the members of the Spalding-Pike Counties Medical Society at a banquet on January 20 at the Griffin Hotel. Dr. H. W. Copeland, Griffin, President of the society, was toastmaster. Dr. Arthur G. Fort, Atlanta, President-Elect of the Association; Dr. H. W. Copeland, Griffin; Dr. A. H. Frye, Griffin, and Dr. Allen H. Bunce, Atlanta, were impromptu speakers.

The Director of Regulatory Work of the United States Department of Agriculture announces that there were 118 seizures of adulterated and misbranded foods and drugs during the month of November, 1930, and 158 in the month of December.

Dr. Richard Binion, Milledgeville, was elected chairman of the Baldwin County, Board of Health.

Dr. R. A. Berry, Cario, has been elected Commissioner of Health for Sumter County.

The Burke County Medical Society met at the Anthony Wayne Hotel, Waynesboro, on January 8. Officers were elected for 1931.

Dr. and Mrs. J. H. Baxter, Ashburn, entertained the members of the Turner County Medical Society at their home on January 9. A three course dinner was served. The society held its annual election of officers for 1931.

The Burke County Medical Society met at the Anthony Wayne Hotel, Waynesboro, on February 5. Dr. G. T. Bernard, Augusta, read a paper entitled, "The Common Skin Diseases"; Dr. Irvine Phinizy, Augusta, spoke on "Propaganda Within the Profession".

Dr. Allen H. Bunce, Atlanta, was invited by the Secretary of the Interior by directoin of the President and on his behalf to attend the meetings of the Section on Medical Service of the White House Conference on Child Health and Protection, called in the city of Washington to be held February 19-21, 1931.

Hon. Robert F. Maddox, Atlanta, was re-elected President of the State Board of Health on January 28th, for a term of two years. Dr. J. H. McDuffie, Columbus, was elected Vice-President. Mr. Maddox spoke in reference to the expenditures and work of the Board in part as follows: "The State Board of Health has by careful management been able to operate within the funds received from the state, without contracting any debts, as we believe the responsibility of financing the various departments of the state should rest upon the legislature, whose duty it is to provide funds to meet the appropriations. The State Board of Health is one department in the state which has not spent or contracted to spend more money than it annually receives and it is conducted on a splendid business-like basis". Dr. T. F. Abercrombie, Commissioner of Health, showed in his report that the death rate in Georgia had decreased 1.6 per cent, or 0.2 per 1,000 population from the 1929 rate; and that the birth rate increased 0.2 per 1,000 population during the same period.

Dr. Raymond V. Harris, Savannah, delivered an address before the Council of Jewish Women and the Georgia Federation of Women's Clubs of the Fifth District in Atlanta on January 19th.

Dr. Jabez Jones, Savannah, read a paper before a meeting of the Georgia Medical Society on January 27th, entitled "Undiagnosed Stricture Condition"; Dr. John L. Elliott, Savannah, read a paper entitled, "Ureteral Stricture"; Dr. James C. Metts., Savannah, "The Medical Care of Chronic Gastric Ulcer".

The Sumter County Medical Society met in Americus on January 8th. Dr. B. T. Wise read a paper entitled, "Biliary Tract Diseases" and gave case reports.

Dr. Geo. W. Heriot, Jr., and Dr. Otto W. Schwalb have been elected City Health Officers for Savannah.

Dr. T. C. Davison, Atlanta, President of the Fulton County Medical Society, was the guest before the Men's Bible class on February 1st at the "Doctors' Day" program of the Druid Hills Baptist Church.

The Whitfield County Medical Society met at Dalton on Febraury 5th. Dr. M. F. Haygood, Superintendent of the State Tuberculosis Sanatorium, Alto, delivered an address on the Prevention, Control and Treatment of Tuberculosis. The members of the society will give clinics for the control of tuberculosis in March, the date to be announced later. They will be assisted by Dr. Haygood and his staff.

The Randolph County Medical Society held its annual clinic at the Patterson Hospital, Cuthbert, on February 5th. The members of the society were assisted by the faculty of the University of Georgia Medical Department, Augusta.

The Eighth District Medical Society met at the Athens General Hospital, Athens, on Febraury 11th. The suregons on the staff of the hospital gave clinics on surgery; the members of the Clarke County Medical

Society gave case reports and medical clinics; members of the county societies in the district gave case reports and clinics. Dr. Lewis R. Casteel, Metasville, President of the society; and Dr. G. Y. Moore, President of the Association, delivered addresses. Luncheon was served at the Y. W. C. A. Building.

The Dougherty County Medical Society met at the New Albany Hotel, Albany, on February 6th. Dr. Hugh H. Young, Baltimore, delivered an address on "The Prostate Gland" and illustrated his remarks with lantern slides. The society extended him an invitation to make annual lectures while in the South. Many prominent physicians from adjoining counties attended the meeting in addition to the members of the society.

The Fulton County Medical Society held its regular meeting at the Academy of Medicine on February 6th. Dr. A. G. Fort, Atlanta, President-Elect of the Association, read a paper entitled "Malignancy of Mastoid"; Dr. S. J. Sinkoe, Atlanta, "Pyelographic Evidence of Horseshoe Kidney"; Dr. Roger W. Dickson, Atlanta, "The Closed Method of Treatment of Acute Empyema"; Dr. A. E. Boling, Jr., Atlanta, "Cesarean Section Under Local and Spinal Anesthesia"—illustrated with moving pictures. Dr. James R. McCord, Dr. Geo. W. Fuller and Dr. W. S. Dorrough, all of Atlanta, lead the discussions.

The Terrell County Medical Society entertained the members of the Randolph County Medical Society at a bird dinner on January 29th. Dr. S. P. Kenyon, Dawson, read a paper entitled "Diagnosis and Treatment of Diseases of the Heart".

Drs. William A. Mulherin, Eugene E. Murphey, and Joseph Akerman, all of Augusta, attended the White House Conference on Child Health and Protection in Washington, D. C., on February 19, 20, 21.

Dr. R. V. Lamar, formerly of Augusta and a member of the faculty of the University of Georgia Medical Department, has moved to Milledgeville and will serve as pathologist on the staff of the Georgia State Sanitarium.

The Commissioners of Health of Decatur and Mitchell counties, in cooperation with the State Board of Health and the United States Public Health Service, held Trachoma Clinics in Bainbridge on February 10th. Dr. T. F. Abercrombie, Commissioner of Health, reports that there are about 300 cases of trachoma in the two counties.

Dr. Samuel J. Sinkoe announces the removal of his office to 406-7 Candler Building, Atlanta. Practice limited to urology.

OBITUARY

Dr. Frederick D. Patterson, Cuthbert; member; Vanderbilt University School of Medicine, Nashville, Tenn., 1890; aged 63; died at a private hospital in Cuthbert of pneumonia on December 31, 1930. He was born and reared in Stewart County and moved to Cuthbert 35 years ago. For more than a year Dr.

Patterson had not been in active practice. He was one of the leading physicians and surgeons of southwest Georgia and had endeared himself to the people of Randolph and adjoining counties. Dr. Patterson and his nephew, Dr. J. C. Patterson, Cuthbert, established the Patterson Hospital in 1920. Surviving him are his widow, and three sons, Captain L. K. Patterson of Fort Benning; Dr. Fred D. Patterson, Jr., Ames Iowa; Mr. R. A. Patterson, Mayor of the city of Cuthbert. Funeral services were conducted from the residence.

Dr. Worth Edwin Yankey, Atlanta; member; Atlanta School of Medicine, Atlanta, 1906; aged 45; died at a private hospital in Atlanta on January 10, 1931. He was born in Louisville, Ky., and moved to Albany, Ga., with his parents when only ten years of age. At the age of sixteen he was enrolled as a student in the Atlanta School of Medicine, later received his M.D. degree and began the practice of medicine when 21 years old. While unassuming and devoid of ostentation, Dr. Yankey possessed a wonderful capacity for friendship. He practiced in Atlanta for a quarter of a century and was recognized as a skillful surgeon and an honorable citizen. Surviving him are his widow, one son, Worth Edwin Yankey, Jr.; one brother, Lewis Yankey, Savannah; and an uncle, Dr. E. C. Davis, Atlanta. Funeral services were conducted by Dr. Richard Orme Flinn, pastor of the North Avenue Presbyterian church, from the residence of Mrs. J. R. Gray, 2882 Peachtree Road, Atlanta, and interment was in the city cemetery at Albany.

Dr. Henry Luther Monford, Dublin; member; Emory University School of Medicine, Emory University, 1914; aged 42; died of streptococcus septicemia at a private hospital in Dublin on January 5, 1931. He was a prominent physician and surgeon. The people of Laurens and adjoining counties held him in high esteem. He was affable and courteous to everyone, and always generous to his friends and patients. Dr. Montford was a member of the Woodmen of the World, American Medical Association, and the First Baptist church. Surviving him are his widow, two daughters, Misses Reba and Kodell Montford. Funeral services were conducted from the First Baptist church. Interment was in Northview cemetery.

Dr. James A. Ward, Cordele; member; Emory University School of Medicine, Emory University, 1891; aged 62; died at his home on January 10, 1931. He was born at Villa Rica and reared in Douglasville. After graduating in Medicine he moved to Richwood and practiced there for about ten years, then moved to Cordele where he continued his practice until his death. His services in alleviating suffering and restoring people to health were inestimable. Dr. Ward was a great friend of the unfortunate and never lost any time in going to the bedside of the sick without regard to their ability to pay for his services. He had thousands of warm friends in Crisp and adjoining counties. Dr. Ward was a member of the Shrine and the First

Baptist church. Surviving him are his mother, Mrs. Mary Connor Ward, Salisbury, N. C., his widow, two daughters, Mrs. Hilda Marshall, Miami, Fla.; and Miss Mildred Ward, Cordele; two sons, James and Charles Ward, Cordele. Funeral services were conducted from the First Baptist church by Rev. R. J. Mincey, assisted by Rev. Martin Heflin. Interment was in Sunny Side cemetery.

Dr. Edward B. Terrell, Greenville; University of Louisville School of Medicine, 1877; aged 73; died at a private hospital in Atlanta on January 12, 1931. He was born and reared in Meriwether county. Dr. Terrell was a prominent physician, practiced in Meriwether county until he retired about eight years ago. He was a civic leader in his home community and a member of the Baptist church. Surviving him are his daughter, Mrs. T. W. Tift, Atlanta, and one brother, Senator James Render Terrell, of Greenville. Funeral services were conducted from the Baptist church and interment was in the city cemetery.

Dr. William Holt Worrill, Ochlochnee; Georgia College Eclectic Medicine and Spurgery, Atlanta, 1912; aged 48; died at his home on January 15, 1931. He was known throughout the county and the people of his community are deeply grieved. Dr. Worrill had been an active, generous and wholesome citizen. Surviving him are his mother, his widow, and one daughter, Miss Sarah Worrill, of Ochlochnee. Funeral services were conducted from the First Methodist church by Rev. W. A. Huckabee. Interment was in the Lumpkin cemetery.

Dr. Captain Hunter House, Atlanta; Georgia College Eclectic Medicine and Surgery, Atlanta, 1907; aged 48; died at his home, 2041 House St., S. E., on January 15, 1931. He was born in DeKalb county and had made his home in De Kalb and Fulton counties all his life. Dr. House practiced medicine in Atlanta continuously after graduating in medicine, except for two years spent in Miami, Fla. Surviving him are his widow, one daughter, Miss Mildred House, and one son, C. H. House, Jr. Funeral services were conducted by Rev. M. M. Maxwell from the Wesley Chapel church in DeKalb county and interment in the churchyard.

Dr. Albert Lee Franklin, College Park; Emory University School of Medicine, 1892; aged 61; died at his home, 514 East Cambridge Ave., on January 15, 1931. He began the practice of medicine in Adairsville immediately after graduation and eight years ago moved to College Park. Dr. Franklin was a prominent physician and a member of the Masonic lodge and the College Park Presbyterian church. Surviving him are his widow, two daughters, Mrs. T. E. W. Youman and Mrs. J. T. Campbell; one son, William Franklin. Funeral services were conducted from the College Park Presbyterian church and interment was in College Park cemetery.

Dr. Sophia C. Davis, Augusta; Georgia College Eclectic Medicine and Surgery, Atlanta, 1894; aged 80; died at her home on January 16, 1931. She was born in Saluda, South Carolina. Dr. Davis moved to Augusta in 1900 and practiced medicine there for five years, then city health officer for Augusta for a number of years. Later she became interested in humane work and was president of the local society for years. Dr. Davis sponsored a number of ordinances in the city of Augusta which forbade cruelty to animals. Surviving her are an adopted daughter, Sophia Davis; one brother, Zebulon DeLoach, Saluda, S. C. Funeral services were conducted at the graveside and interment was in the city cemetery at Tennesse.

Dr. Samuel John Wylie, Columbus; Columbus Medical College, Columbus, Ohio, 1887; aged 67; died at his home after an illness of short duration on January 20, 1931. He was born in Amanda, Ohio. Dr. Wylie moved to Columbus immediately after receiving his degree in medicine and practiced until the time of his death. He was a member of the Elks and the First Presbyterian church. Surviving him are his widow, two sons, W. B. Wylie, Presque Isle, Maine; H. B. Wylie, Miami, Fla.; two daughters, Mrs. S. H. Hinnant, Jr., and Mrs. Wm. L. Black, both of Miami, Fla. Funeral services were conducted from the residence by Dr. Robert S. Boyd, pastor of the First Presbyterian church and interment was in Riverdale cemetery.

NOTICE OF EXAMINATION FOR ENTRANCE INTO THE REGULAR CORPS OF THE U. S. PUBLIC HEALTH SERVICE

Examination of candidates for commission as Assistant Surgeon in the Regular Corps of the U. S. Public Health Service will be held at Washington, D. C., on March 9, 1931.

Candidates must be twenty-three years and not over thirty-two years of age. They must have been graduated in medicine at a reputable medical college, and have had one year's hospital experience or two years' professional practice. They must satisfactorily pass oral, written, and clinical tests before a board of medical officers, and undergo a thorough physical examination.

Successful candidates will be recommended for appointment by the President, with the advice and consent of the Senate.

Request for information or permission to take this examination should be addressed to the Surgeon General, U. S. Public Health Service, Washington, D. C.

U. S. CIVIL SERVICE EXAMINATION

The United States Civil Service Commission announces the following named open competitive examination:

Junior Medical Officer (Interne)

Applications for junior medical officer (interne) must be on file with the Manager of the Fourth United States Civil Service District, Washington, D. C., not later than February 14, 1931.

The entrance salary is \$2,000 a year.

This examination is to fill vacancies in Saint Elizabeth's Hospital, Washington, D. C.

Competitors will not be required to report for examination at any place, but will be rated on their education, training, and experience.

Applicants must have been graduated from a medical school of Class A standing, with the degree of Doctor of Medicine, not more than two years prior to the date of closing receipt of applications, provided, that applications will be accepted from fourth-year students under certain specified conditions.

Full information may be obtained from the United States Civil Service Commission, Washington, D. C., or from the Secretary of the United States Civil Service Board of Examiners at the postoffice or custom-house in any city.

UNITED STATES CIVIL SERVICE EXAMINATION

The United States Civil Service Commission announces the following-named open competitive examination:

Physiotherapy Aide

Applications for physiotherapy aide must be on file with the United States Civil Service Commission, Washington, D. C., not later than March 10, 1931.

The examination is to fill vacancies in the Veterans' Administration, and in the Public Health Service.

The entrance salaries range from \$1,800 a year upward, according to grade and service.

Competitors will be rated on practical questions, and on their education, training, and experience.

Applicants must have had at least two years of institutional experience as a physiotherapy aide, pupil aide, or physiotherapy assistant, except that certain specified education, along physical education lines, may be substituted in part for the required experience.

Full information may be obtained from the United States Civil Service Commission, Washington, D. C., or from the Secretary of the United States Civil Service Board of Examiners at the postoffice or custom house in any city.

UNITED STATES CIVIL SERVICE EXAMINATIONS

The United States Civil Service Commission announces the following-named open competitive examinations:

Chief Nurse (Indian Service); Head Nurse (Indian Service); Graduate Nurse (various services); Graduate Nurse, Visiting Duty (various services).

Applications for the above-named positions will be rated as received by the United States Civil Service Commission at Washington, D. C., until June 30, 1931.

The examinations are to fill vacancies in the Departmental Service, Washington, D. C., and in the Veterans' Bureau, Public Health Service, and Indian Service.

The entrance salaries range from \$1,620 to \$2,300 a year, according to grade and service.

Competitors will not be required to report for examination at any place, but will be rated on their education, training, and experience.

Except in the case of persons entitled to preference because of military or naval service, applicants must have completed at least fourteen units of high-school work acceptable for college entrance. Graduation from a suitable school of nursing, not less than two years' post-graduate experience in nursing, and State registration as a graduate nurse are the requirements for the position of graduate nurse. Certain additional training or experience is required for the other grades.

Full information may be obtained from the United States Civil Service Commission, Washington, D. C., or from the Secretary of the United States Civil Service Board of Examiners at the postoffice or custom house in any city.

Vitamin Advertising and the Mead Johnson Policy

The present spectacle of vitamin and irradiation advertising running riot in newspapers and magazines and via radio emphasizes the importance of the physician as a controlling agent in the use of vitamin products.

Mead Johnson & Co. feel that vitamin therapy, like infant feeding, should be in the hands of the medical profession, and consequently refrain from exploiting vitamins to the public.

ATLANTA

Atlanta is within twenty-four hours' train ride of two-thirds of the population of the United States. The city ranks fourth in the United States in point of Federal activities; in telegraph activities, Atlanta is the third city in the world!

Two national highways, hard surface, from Canada to the Gulf, traverse Atlanta—the Dixie Highway, teeming in historic interest, and the Appalachian Scenic Highway, passing through unrivaled scenic beauty. Other points of approach, while not hard surfaced all the way, usually are easily traveled.

Among the many points that allure the sightseer are Stone Mountain, the Cyclorama, depicting the Battle of Atlanta, life size, pronounced by a Viennese art critic the finest painting of its kind in the world; Emory University Museum, containing remarkable Egyptian and Babylonian collection; John Wesley's pulpit; State Capitol Museum; Burns' Club, only replica of Bobby Burns' birthplace, and many others.

MADUROMYCOTIC MYCETOMA

A case of maduromycotic mycetoma occurring in an American negro producing white granules is reported by Jack W. Jones and Herbert S. Alden, Atlanta, Ga. (*Journal A. M. A.*, Jan. 24, 1931). Cultural and morphologic characteristics of the fungus causing this mycetoma are presented by the authors. These characteristics classify it as a hyphomycete of the order *Conidiosporales*, suborder *Sporophorinae*, genus *Scedosporium* Saccardo 1911, called *Scedosporium apiospermum* or its probable homologue *Scedosporium sclerotiale* Pepere 1914.

Medical Association of Georgia

Next Annual Session, Atlanta, Ga., May 12, 13, 14, 15, 1931

OFFICERS

President.....	G. Y. Moore, Cuthbert	Second Vice-President.....	S. T. R. Revell, Louisville
President-Elect.....	Arthur G. Fort, Atlanta	Secretary-Treasurer.....	Allen H. Bunce, Atlanta
First Vice-President.....	Geo. A. Traylor, Augusta	Parliamentarian.....	M. A. Clark, Macon

DELEGATES TO THE A. M. A.

Wm. H. Myers (1931-2).....	Savannah	Alternate, C. W. Roberts.....	Atlanta
Alternate, Wm. A. Mulherin.....	Augusta	O. H. Weaver (1930-1).....	Macon
E. C. Thrash (1931-2).....	Atlanta	Alternate, C. K. Sharp.....	Arlington

COUNCIL

M. M. Head, Chairman.....	Zebulon	C. L. Ayers, Clerk.....	Toccoa
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Councillors

1. Wm. H. Myers (1933).....	Savannah
2. J. A. Redfearn (1933).....	Albany
3. J. C. Patterson (1933).....	Cuthbert
4. O. W. Roberts (1933).....	Carrollton
5. E. C. Thrash (1931).....	Atlanta
6. M. M. Head (1931).....	Zebulon
7. M. M. McCord (1931).....	Rome
8. H. M. Fullilove (1931).....	Athens
9. C. L. Ayers (1932).....	Toccoa
10. S. J. Lewis (1932).....	Augusta
11. A. S. M. Coleman (1932).....	Douglas
12. J. Cox Wall (1932).....	Eastman

Vice-Councillors

1. C. Thompson (1933).....	Millen
2. R. F. Wheat (1933).....	Bainbridge
3. Chas. A. Greer (1933).....	Oglethorpe
4. W. H. Clark (1933).....	LaGrange
5. W. A. Selman (1931).....	Atlanta
6. K. S. Hunt (1931).....	Griffin
7. W. H. Perkinson (1931).....	Marietta
8. Paul L. Holliday (1931).....	Athens
9. J. K. Burns, Jr. (1932).....	Gainesville
10. H. D. Allen, Jr. (1932).....	Milledgeville
11. K. McCullough (1932).....	Waycross
12. J. W. Edmondson (1932).....	Dublin

COMMITTEES

Scientific Work

C. W. Roberts, Chairman.....	Atlanta
Sam P. Wise.....	Americus
A. H. Bunce, Secretary-Treasurer.....	Atlanta
G. Y. Moore, President.....	Cuthbert
A. G. Fort, Pres.-Elect.....	Atlanta

Public Policy and Legislation

J. W. Palmer, Chairman (1932).....	Ailey
Dan Y. Sage (1931).....	Atlanta
A. R. Rozar (1933).....	Macon
V. H. Bassett (1931).....	Savannah
G. Y. Moore, President.....	Cuthbert
A. G. Fort, President-Elect.....	Atlanta
A. H. Bunce, Secretary-Treasurer.....	Atlanta
T. F. Abercrombie, Commissioner of Health, State of Georgia.....	Atlanta

Medical Defense

M. A. Clark, Chairman (1933).....	Macon
Wm. A. Mulherin (1934).....	Augusta
E. C. Thrash (1931).....	Atlanta
M. M. Head, Chairman of Council.....	Zebulon
A. H. Bunce, Secretary-Treasurer.....	Atlanta
A. G. Fort, President-Elect.....	Atlanta

Hospitals

C. S. Lentz, Chairman (1933).....	Augusta
Grady N. Coker, Secretary (1932).....	Canton
K. McCullough, (1934).....	Waycross
Geo. F. Klugh (1935).....	Waycross
Julian K. Quattlebaum (1931).....	Savannah
A. G. Fort, President-Elect.....	Atlanta

Abner Wellborn Calhoun Lectureship

J. E. Paullin, Chairman (1933).....	Atlanta
H. I. Reynolds (1934).....	Athens
Eugene E. Murphy (1935).....	Augusta
Craig Barrow (1931).....	Savannah
Frank K. Boland (1932).....	Atlanta
A. G. Fort, President-Elect.....	Atlanta

Necrology

M. Hines Roberts, Chairman.....	Atlanta
C. K. Sharp.....	Arlington
H. M. Branham.....	Brunswick

Medical History of Georgia

E. C. Thrash, Chairman.....	Atlanta
Frank K. Boland.....	Atlanta
M. A. Clark.....	Macon
G. Y. Moore, President.....	Cuthbert
A. G. Fort, President-Elect.....	Atlanta
A. H. Bunce, Secretary-Treasurer.....	Atlanta

Crawford W. Long Memorial Prize

Wm. R. Dancy, Chairman.....	Savannah
Stewart R. Roberts.....	Atlanta
V. P. Sydenstricker.....	Augusta
George Bachmann.....	Atlanta
R. V. Lamar.....	Augusta

Cancer Commission

J. L. Campbell, Chairman.....	Atlanta
G. H. Lang.....	Savannah
Chas. H. Watt.....	Thomasville
J. C. Patterson.....	Cuthbert
A. A. Barge.....	Newnan
H. G. Weaver.....	Macon
R. M. Harbin.....	Rome
Stewart D. Brown.....	Royston
M. B. Allen.....	Hoschton
W. J. Cranston.....	Augusta
J. W. Simmons.....	Brunswick
J. W. Edmondson.....	Dublin
E. L. Bishop.....	Atlanta

Advisory Committee—Woman's Auxiliary

B. H. Minchew, Chairman.....	Waycross
Marion T. Benson.....	Atlanta
V. C. Daves.....	Vienna
Wm. R. Dancy.....	Savannah
Paul L. Holliday.....	Athens

Fraternal Delegates to Other State Meetings

To Visit Alabama: J. Cox Wall, Eastman; Jas. A. Fountain, Macon.

To Visit Florida: Gordon Chason, Bainbridge; W. F. Reavis, Waycross.

To Visit North Carolina: R. L. Miller, Waynesboro; S. A. Boland, Thomson.

To Visit South Carolina: Stewart R. Roberts, Atlanta; A. G. Fort, Atlanta.

To Visit Tennessee: M. M. McCord, Rome; Joe. P. Bowdoin, Adairsville.

ATLANTA LEADS AS CENTER
OF MEDICAL AID

*Laurence Everhart Calls Growth of Health
Service Important Achievement*

Atlanta's rise to an undisputed place as the medical center of the Southeast was pointed out Monday by Laurance Everhart, proprietor of Everhart Surgical Company, as one of its most important achievements.

Thousands of patients are sent each year by their local physicians from other towns and cities into Atlanta for treatment which is obtainable to no other place in the South, Mr. Everhart stated.

The Everhart Surgical Supply Company was established in 1916 by Mr. Everhart and has enjoyed an ever-growing business through fair dealing with the public, doctors and hospitals. It carries all articles necessary for the sick-room and hospital and makes specialties of invalid-chairs, either for rent or for sale; crutches, walking-sticks, trusses, abdominal supporters, elastic hosiery and infrared and therapeutic lamps of all kinds.

Mr. Everhart is the brother of the well-known chemist, Dr. Edgar Everhart, and the popular artist, Miss Adelaide Everhart, of Decatur. He was associated with the Atlanta College of Physicians and Surgeons for eight or ten years prior to entering business for himself and has a wide personal acquaintance with doctors throughout the South.—*The Atlanta Georgian*.

The following notice was sent, by the Fulton County Medical Society, to the office of THE JOURNAL for publication:

Attention Doctors.

You are warned against a man who gives the name of Jas. Berry Ellis. He is probably a drug addict. He has light-colored hair, looks to be about 23 to 25 years of age, and is rather small. He is not well educated. He is praying upon the urologists. He tells the doctor that he is suffering from kidney stones, and that he has a sister who is a nurse and will give him the medicine until he can get enough money for an operation. In this way he tries to get a prescription for morphine. He is suspected as a dope addict or dope peddler.

Make arrangements to attend the next annual session of the Association to be held at the Biltmore Hotel, Atlanta, May 13, 14, 15.

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See Description, Journal A.M.A.
Volume XLVII, Page 1488.

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at median line,
also fastened
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supporters in-
stead of thigh
straps.

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SURGERY OF THE THYROID GLAND*

Some Unusual Problems

CHARLES E. WAITS, M.D.
Atlanta

Surgery of the thyroid gland has been marked in recent years by many outstanding advances. So great and rapid has been the progress in this field of surgery that the mortality in experienced hands has been reduced to a point in the neighborhood of 1 per cent. Many of the complications which in the earlier days of thyroid surgery were responsible for a rather high operative mortality have been almost eliminated. In spite of this fact, however, if one expects to keep a creditable mortality experience, it is necessary to keep in mind the unusual accidents or complications which, even though rare, may occur in the practice of the most able surgeon.

For a basis of discussion in this article I present five case reports taken from an operative group of 409 patients. The final diagnosis and unusual conditions occurring in the group here reported are: first, squamous-cell epithelioma (epidermoid carcinoma); second, hyperplastic toxic goiter, with cardiac decompensation and extreme bradycardia; third, adenomatous goiter with severe hyperthyroidism, cardiac decompensation, and auricular fibrillation; fourth, tetany following enucleation of two adenomatous growths from the left thyroid lobe, and fifth, permanent myxedema following removal of the usual amount of the thyroid gland for hyperplastic toxic goiter.

CASE 1.—*Squamous-cell Epithelioma (epidermoid carcinoma) of the thyroid gland.*

A white married woman, of 58 years, was admitted

to the hospital on account of an enlargement in the region of the right thyroid lobe, which was first noticed six years previously. Little or no change in the size of the growth had been noticed until three months prior to admission to the hospital. Considerable increase in the size had been observed during the past three months, slight huskiness in the voice for a period of two months, and recently there had been frank hoarseness. Her general health had always been good until recently, when she noticed a tendency to fatigue, nervousness, and increased irritability. No loss of weight, palpitation, or tachycardia had occurred.

Examination.—The patient was well nourished, of normal build; eyes apparently normal. Teeth and gums appeared to be in good condition; pharynx congested; tonsils enlarged, red, and cryptic. A few enlarged lymph glands could be palpated posterior to the sternomastoid muscle on each side. There was a nodule which seemed to involve the upper half of the right thyroid lobe, approximately $3\frac{1}{2}$ by 2 cm. in size. It was firm, but movable. Lungs were clear anteriorly and posteriorly. Heart sounds were clear, regular in rate and rhythm, no murmurs; blood pressure systolic 140, diastolic 90. Basal metabolic rate was normal.

Admission Diagnosis.—Thyroid Adenoma (probably malignant).

After forty-eight hours of rest, light diet, elimination, and increased fluids, the thyroid was exposed through the usual collar incision under anesthesia. A very firm nodular growth was located in the upper portion of the right lobe. The diseased tissue seemed to extend upward into the pyramidal lobe, but at no point had it seemed to penetrate the gland capsule. At the point of the junction of the larynx and trachea the fascia overlying these structures seemed thickened. Practically all of the right lobe was removed. The left lobe was then exposed. It appeared normal. No enlarged lymph nodes were noted during the operation. Patient's convalescence was uneventful.

Microscopic examination of the tissue removed showed it to be squamous-cell (epidermoid) carcinoma. (Fig. 1.)

Comment

The great majority of malignant lesions of the thyroid gland are classified as adenocarcinoma. Primary sarcoma is very uncommon. In connection with this case a search of the literature reveals that squamous-cell epithelioma of the thyroid is extremely rare.

*Read before the Medical Association of Georgia, Augusta, Ga., May 16, 1930.

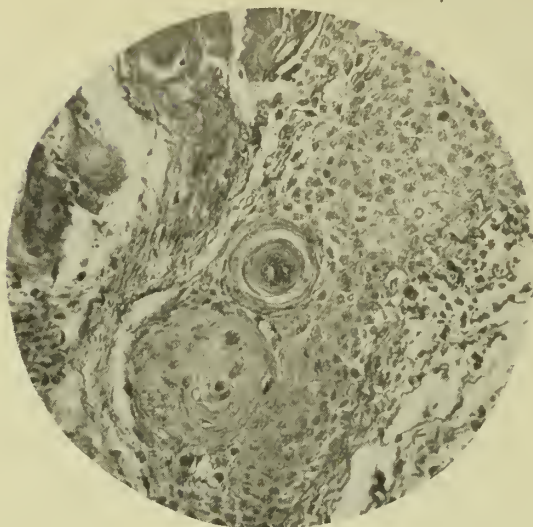


Fig. 1—Epidermoid carcinoma showing characteristic pearl.

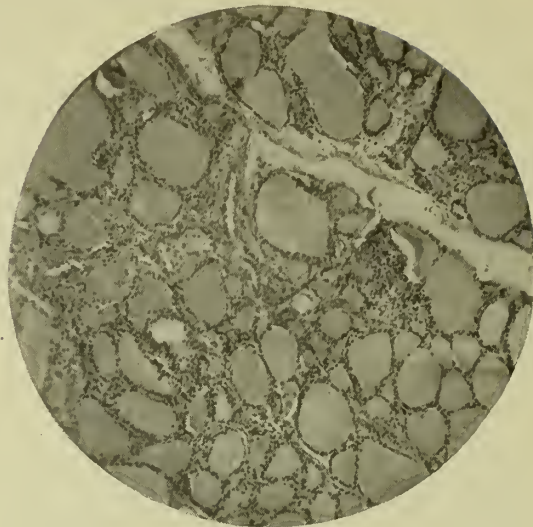


Fig. 2—Hyperplastic toxic goiter with marked hyperplasia.

Roeder¹ reported a case in 1921 and included with the case report abstracts of nine cases gathered from a complete review of the literature. Dixon² in 1928 reported one case from the Mayo Clinic.

Presumably this particular type of thyroid malignancy has its origin in the remnant of the thyroglossal duct. The location of the lesion in this patient would seem to strengthen this presumption. Fortunately for the patient, this type of thyroid malignancy does not seem to metastasize early. However, in spite of this fact, and its comparative rarity, this case illustrates the importance of keeping in mind the possibility of malignancy, however innocent the nodule may appear to be. This patient consulted a competent surgeon five years prior to operation, and was advised not to bother about the nodule unless it increased in size or caused symptoms of hyperthyroidism. Too many malignant lesions of the thyroid are beyond help when they reach the surgeon. It is, of course, too early after operation to predict the outcome in this patient. She has had thorough irradiation since operation, and a recent study, both physical and roentgenologic, approximately nine months after operation, showed no evidence of recurrence or metastasis.

CASE 2.—*Hyperplastic toxic goiter, cardiac decompensation with sinus bradycardia.*

A white married woman, of 54 years, was admitted to hospital with chief complaints of nervousness, weakness, and slight enlargement over the thyroid area.

Until eighteen months previous she had been perfectly well; since that time she had become increasingly nervous and irritable. This latter was soon associated with a growing weakness and ease of fatigue. Nine months after the onset she noticed a slight enlargement over the thyroid area. Digestive disturbances, palpitation, and moderate edema of the extremities soon incapacitated her for household duties. She lost approximately forty pounds during her illness. Physical examination revealed an emaciated nervous woman. The tonsils were moderately enlarged and cryptic and there was a slight bilateral enlargement of the thyroid. The heart rate at rest was 120 to 140 per minute three days prior to hospital admission and there was moderate hypertrophy with a loud systolic apical murmur. The blood pressure was systolic 142, diastolic 60, pulse pressure 82. Basal metabolic rate was plus 56. There was generalized edema, marked enlargement of the liver ascites; definite bronzing of the skin and cyanosis. On admission to hospital the patient's pulse was 100. During the next three days there was a fall in rate to 68, after which it ranged from 66 to 74, until time of operation. After twenty days of absolute rest, Lugol's Solution and general supportive measures the patient was operated upon under local anesthesia. The gland was diffusely enlarged, extremely vascular and friable. The capsule was adherent to the gland in several places, suggesting thyroiditis. An ideal amount of both lobes and isthmus was resected. The postoperative diagnosis was same as preoperative. Patient stood the operation fairly well, and for twenty-four hours her condition was quite satisfactory. From about the thirty-sixth to the seventy-second hour postoperative she suffered an extreme exacerbation of hyperthyroidism, her temperature ranging from 103 to 105. She was exceedingly restless and delirious. During this exacerbation her pulse rate ranged from 80 to 100. With a temperature of 105 she had a pulse rate of 90. As the reaction subsided her pulse rate dropped gradually to 42 on the eighth postoperative day. It then ranged from 42 to

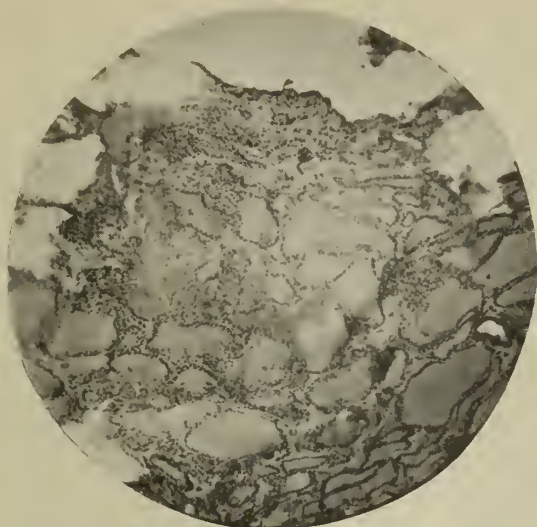


Fig. 3—Adenomatous goiter in which temporary tetany followed enucleation of a single nodule.

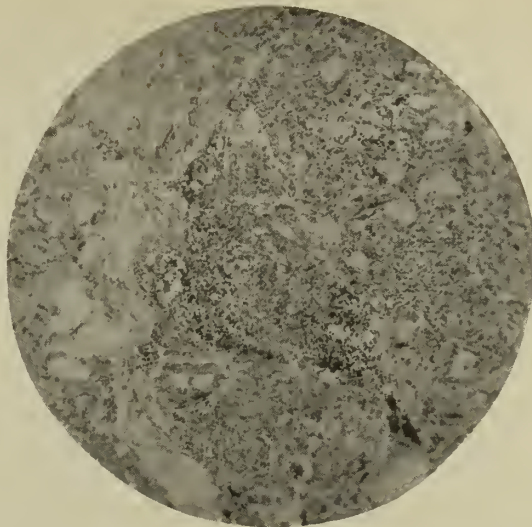


Fig. 4—Chronic thyroiditis associated with severe hyperthyroidism. Thyroidectomy followed by permanent myxedema.

56 for a period of three weeks, when it began to rise gradually and reached normal six weeks after operation.

Comment

This patient illustrates the penalty of delaying operation and the abuse of iodine therapy, together with the most uncommon complication of bradycardia developing during the later course of the disease. Probably two years had elapsed between the onset of hyperthyroidism and operation, during which time she had taken iodine for long and varying periods. For this reason the severe hyperthyroid reaction was not unexpected.

After the most careful preoperative preparation and the rather definite improvement in the patient's general condition, I was apprehensive concerning the outcome.

The most interesting or unusual feature about this patient was the development of extreme bradycardia and the possible influence which this complication may have had in the ultimate recovery of the patient. With a temperature of 105 in a patient suffering with an extreme postoperative hyperthyroid exacerbation one would expect a pulse rate of 180 to 200, or above.

As previously stated, this patient's pulse was 90 at the height of the reaction. The question here is—to what extent, and how long, could this patient's heart muscle have tolerated a pulse rate in keeping with the temperature? It would have been interesting to have had an electrocardiographic study. Unfortunately the patient's condition

would not permit her removal to a laboratory during the period of extreme bradycardia. Presumably, from the polygraphic tracing, she had an unusually sensitive sinoauricular node, and the abnormal slowness of heart rate probably came about through vagal stimulation as a result of severe toxemia. (Fig. 2.)

CASE 3.—Adenomatous goiter with severe hyperthyroidism, and auricular fibrillation.

A white married woman, of 52 years, was admitted to hospital with complaints of nervousness, weakness, loss of weight, and a growth in her neck. She had noticed thyroid enlargement thirty years previously, but the growth had been slow and without symptoms until four years before admission when the menopause began. At that time she began to notice nervousness, weakness, palpitation, loss of weight, sweating, and irritability. Three and a half years later the thyroid enlargement became more rapid and she experienced increasing dyspnea, husky voice, and dysphagia. Digestive disorders, cardiac irregularity, and general disability then supervened. Physical examination revealed a very nervous, emaciated, and worn-out individual. There were positive Stellwag and Rosenbach signs. The thyroid was moderately and diffusely enlarged; it was firm and nodular without thrills or bruit. Respiration was increased and dyspneic in character. The heart measurements were markedly increased; there was a loud systolic murmur and marked irregularity in rate and rhythm. There was a pulse deficit of 60-80, blood pressure was systolic 170, diastolic 60. Generalized edema and ascites were obvious. The basal metabolic rate was plus 55. The preoperative diagnosis was adenomatous goiter, with severe hyperthyroidism, cardiac decompensation, and auricular fibrillation.

After twenty-five days of absolute rest in bed, Lugol's Solution, digitalis, and a strict Karell diet

(sufficiently long to reduce the edema) the patient was operated upon under local anesthesia. Approximately four-fifths of the gland was resected which contained numerous nodules of various sizes. The postoperative diagnosis was multiple thyroid adenomata, with severe hyperthyroidism. Recovery was uneventful.

Comment

This patient is included in the group to emphasize what may be accomplished with proper management in older individuals suffering with extreme hyperthyroidism, and in whom one sees more often, cardiac decompensation. My first inclination, after careful study of the patient, was to classify her as being physically unable to undergo operation. She was in a state of almost complete collapse, with marked auricular fibrillation and generalized edema. At first, she responded very slowly to all measures of treatment instituted, including thorough irradiation over the gland area. Later, however, with complete rest, a strict Karell diet, she improved to a point where operation was done successfully, following which convalescence was uneventful.

With patients of this type it is most important to control auricular fibrillation, rid them of excess fluid, and avoid unnecessary loss of time and blood at operation.

CASE 4.—*Temporary tetany following enucleation of two adenomatous growths from left thyroid lobe.*

A white married woman, of 44 years, entered the hospital with the chief complaints of nervousness and a nodular enlargement in the left side of her neck anteriorly. This growth was first noticed eight years previously, but had caused no unpleasant symptoms until recently, when she noticed slight pressure, especially when in a recumbent posture. During the past year she had experienced increasing nervousness, irritability, palpitation, tremor of the extremities, shortness of breath, increased appetite, and loss of weight. The general physical examination was negative, except for the very definite nodular growth in the region of the left thyroid lobe, a pulse rate of 110 to 120, tremor, and a basal metabolic rate of plus 30. After three days' complete rest in bed, the thyroid was exposed through the usual collar incision under local anesthesia. Two moderate sized nodules were enucleated from the left lobe. The right lobe and isthmus were then explored and appeared to be normal. Microscopic examination showed this tissue to be adenomatous in character.

On the morning of the second postoperative day the patient complained of pain and a drawing sensation over the entire body, especially marked in the face, hands, forearms, and calves of legs. Chevostek's sign was positive, the hands were markedly drawn (typical

obstetrical hand), and the muscles of the forearms showed definite tonic contraction. The patient was extremely apprehensive. Blood taken before medication showed a calcium content of 4.2 ng. per 100 c.c. of blood. Parathormone (Collip's extract) was given in ten unit doses every six hours until the patient had received forty units. Calcium lactate and sedatives were administered orally. All marked symptoms subsided within forty-eight hours, and on the sixth postoperative day the blood calcium was 8.5 ng. per 100 c.c. of blood. Mild symptoms of the condition persisted for three weeks, at the end of which time the blood calcium was normal. (Fig. 3.)

Comment

In the earlier days of thyroid surgery it was not unusual to observe tetany following thyroidectomy. Today, however, with the greatly improved surgical technique, it is comparatively rare. However, occasionally in any considerable number of thyroid operations, and in spite of careful technic, one may observe tetany of sufficient severity to demand prompt and thorough treatment.

In this case I enucleated two moderate sized nodules from the left lobe without disturbing the blood supply to the isthmus and right lobe. One would not have expected the patient to develop even a temporary tetany. The incident clearly illustrates the importance of keeping in mind the possible abnormal location of the parathyroids, and adequate exposure of the tissue to be resected.

CASE 5.—*Permanent myxedema following the removal of the usual amount of thyroid gland for hyperplastic toxic goiter.*

A white man, 40 years of age, was admitted to the hospital with the complaints of nervousness, shortness of breath, profuse sweating, tremor of hands, and loss of weight. Until eight months previous he had always been in good health. At that time he noticed himself becoming increasingly nervous and irritable. Gradually he noticed tremor of the fingers and excessive perspiration; finally he began having heart attacks, which were characterized by alarming dyspnea. He had been incapacitated for his work practically throughout the entire time. Physical examination revealed a thick-set, very nervous person. The thyroid gland was moderately and diffusely enlarged. Bruit and thrills were detected over both superior poles, but there was no tenderness upon pressure. There was definite exophthalmus; Stellwag and Von Graefe signs were positive. The heart was moderately enlarged, the rate rapid, and there was a soft systolic murmur heard over the apex. Blood pressure was systolic 160, diastolic 90; basal metabolic rate plus 43. The admission diagnosis was hyperplastic toxic goiter.

The patient was put at absolute rest, isolated from company, and given a nourishing diet, sedatives, and

Lugol's Solution. After eight days he was operated upon under nitrous oxide-novocain anesthesia. The thyroid was diffusely enlarged, firm, very vascular, and the capsule adherent at several points. Not more than the usual amount of tissue was resected. Convalescence was uneventful.

Six weeks postoperative his metabolic rate was minus 6 and five months later it was minus 27. At this time he was given thyroid extract grain 1 three times daily. One month later the basal metabolic rate was minus 15. He was not seen for six months, then returned with a metabolic rate of minus 31, having taken no thyroid in the meantime. He had the symptoms and appearance of a myxedematous patient. The thyroid dosage was increased to grains 4 daily until the symptoms cleared. He now requires 2 to 4 grains daily to maintain a low normal basal rate. (Fig. 4.)

Comment

The development of permanent myxedema following thyroidectomy for extreme Grave's disease is rather unusual, especially in adults. Ordinarily, in patients of this type, where one would err once in removing too much gland, one would err ten times in not removing enough. In this patient, I left the operating room with a feeling that I had probably not removed the usual or maximum amount of gland. He was a rather low man, with a short neck which, together with the severe hyperthyroidism and friable tissue, made resection very tedious.

Not a great deal has been mentioned in the literature concerning the association of thyroiditis with hyperplastic toxic goiter and its possible influence in the development of myxedema following thyroidectomy. Any patient with a severe thyroiditis may show temporary, or, in some instances, permanent myxedema, following recovery. This patient had a definite thyroiditis and it seems reasonable to assume that it must have influenced the development of myxedema.

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DISCUSSION ON PAPER OF DOCTOR WAITS

Dr. Julian K. Quattlebaum, Savannah, Ga.—Dr. Waits has presented cases of unusual interest and the intelligent comment on each is a compliment to the capable manner in which he has cared for them.

It has not been a great while since every thyroid case was an unusual problem and in the memory of many now living the risk of goiter surgery has dropped from almost certain death to as low as 1 per cent in some of the great clinics. This great progress has been due to five factors, which in chronological order are:

- (1) general anesthesia; (2) antisepsis and asepsis; (3) modern technic and hemostasis; (4) local anesthesia; (5) iodine therapy.

We can but admire the courage of those pioneers in this field who, before the days of antisepsis and without anesthesia, attempted the removal of this gland. An Arabian surgeon, Albucasis, 939 A.D., made the first attempt to remove a goiter and, as was to be expected, severe hemorrhage marked the effort.

Technical difficulties continued to be the great problem for some time and even the great Billroth had a mortality rate of 40 per cent up to 1869 and he injured the recurrent laryngeal nerve thirty-one times in the first eighty-four cases. With the discovery of anesthesia and the introduction of "Listerism" all surgery went forward with great strides and goiter surgery was no exception. With an increasing number of cases technical difficulties began to give way to the problem of distorted physiology and the severe reactions that were likely to follow operation. All of us can remember the great danger that attended any attempt to operate on an exophthalmic goiter just a few years ago. The simplest case could not be considered a safe risk for unexplainable reactions might follow operation and in spite of every effort prove fatal. Injections of boiling water, pole ligations, multiple operations, ice packs, postoperative crises, and such are terms familiar to all of us, but seldom used at the present time and, although there are still cases that require such treatment, they are very infrequent. The goiter case that is considered inoperable or proves fatal following operation now is unusual indeed.

I have operated on but one case of carcinoma of the thyroid, although it is possible that some of the adenomata that I have removed would have shown malignant degeneration in some part of their structure if it had been searched for.

Thyroid malignancy may be divided into three conditions: (1) Those that appear malignant under the microscope, but are clinically benign; (2) those that appear to be malignant and are such, and (3) those that show practically no evidence of malignancy yet produce metastases.

The genesis of malignant goiter is often very obscure. The majority are definitely of epithelial origin and, according to Hertzler, occur in the proportion of one to 300 persons with goiter and 90 per cent of these develop from fetal adenomata. These figures are vigorously disputed by other writers. However, it is my conviction that any adenoma in the thyroid gland of a person over 25 years should be surgically removed, for it is potentially malignant and toxic.

Dr. Waits' second case is most unusual. I want to emphasize his point of the danger of delaying surgery too long after the use of iodine. Jackson has shown that iodine does not cure the patient, but reduces the basal metabolic rate to approximately 15 per cent above normal at the period of maximum improvement; from which point the condition usually becomes gradually worse and often is not again influenced by iodine. Surgery should be resorted to at this point of maximum improvement and not delayed until the condition is

again critical. I have had a number of patients who refused operation at such a time, only to accept it as inevitable later, after they had lost much of the improvement gained by the use of iodine.

It is truly remarkable how some patients with advanced hyperthyroid are complicated by severe visceral degeneration and every appearance of being beyond help, will have a tranquil convalescence and go on to complete recovery following operation as described in Case 3. The most gratifying cases I have had in the practice of surgery have been in just such patients.

Tetany is a definite clinical syndrome resulting from a suspension or disturbance of parathyroid function. While a rare complication, it may follow any thyroidectomy. There are two types, the acute and the chronic. The acute type comes on shortly after operation, as in the case reported, while the chronic type may not appear for several months following operation. We know that the parathyroid bodies get their blood supply from the inferior thyroid arteries. They vary as to size, number, location, and position, so their blood supply may be interfered with by too perfect hemostasis, by pressure from edema or accumulation of fluid, or from the contracture of scar tissue. In the acute cases the wound should be carefully examined, all serum removed, and hot applications placed on the neck to increase the blood supply, and parathormone should be given intravenously.

Myxedema practically always follows a progressive thyroiditis. It is almost impossible to remove enough of a hyperfunctioning gland to produce it permanently. The type of gland that is apt to have this complication can often be recognized at the time of operation, and thyroid extract started early and the proper explanation made to the patient.

Time will not permit me to more than mention the apathetic thyroidism described by Dr. Lahey in the *Surgical Clinics of North America*, Vol. 9, No. 6, December, 1929, page 1303, as one of the unusual problems we should be on the lookout for. I have had one such case which was quite puzzling to me until I later read Dr. Lahey's explanation of the condition.

I would like to ask Dr. Waits his experience with postoperative pneumonia in thyroid surgery. I have had three deaths in seventy cases, each from this complication.

Dr. Frank K. Boland, Atlanta, Ga.—I think we are fortunate in having men fulfill the qualifications of being thyroid surgeons as well as Dr. Waits fulfills them. The requirements are two, skill in operating, and knowing when to operate and when not to operate. I think Dr. Waits fulfills these requirements admirably.

Just a word about the rather rare form of carcinoma of the thyroid which he reported. In the microscopic sections he showed this was not difficult to diagnose, but as a rule diagnosis is difficult. Not long ago a man of my acquaintance removed a thyroid that he was not sure was malignant. He sent specimens to three leading pathologists, and the three re-

ported, first, thyroiditis; second, carcinoma; third, exophthalmic goiter. This shows how difficult it is to diagnose carcinoma of the thyroid, even on pathologic sections. I think we should all try to be cancer-conscious all the time, for only by the early diagnosis can we hope in any way to reduce the terrific mortality which now faces us. Allen Graham, from whom Dr. Lahey quoted the other day, is authority for the statement that 90 per cent of the carcinomas of the thyroid begin as adenomas. It is very rare to see a primary carcinoma of the thyroid, for these growths start as adenomas and become carcinomatous later, in the vast majority of cases. According to his figures, most of them run from two to ten years before becoming malignant. He states that all nodular goiters in persons over 25 should be treated surgically. I think we should all remember this.

The main criterion of malignancy is invasion of the blood vessels. This is more important than anything that can be shown on microscopic section of the tumor growth itself.

Another point is in regard to metastasis. The metastasis, of course, occurs through the blood stream or through the lymphatics, more often and earlier through the blood stream on account of the peculiar arrangement of the glands, where no basement membrane is present. It is remarkable that in some cases growth has been demonstrated in bone before it is recognized in the gland itself. The lung is the organ which is most frequently attacked by metastases, then the liver, and then bone.

A great deal more could be said about the interesting cases Dr. Waits has given us, but I think the one case of carcinoma of the thyroid should be impressed upon all of us, as showing that while it is comparatively rare (less than 1 per cent of all cases of carcinoma), we should all remain cancer-minded all the time.

Dr. Charles E. Waits, Atlanta, Ga. (closing).—One of the most confusing things about thyroid tissue today is the attitude of most pathologists concerning the classification of goiter. The American Association for the Study of Goiter has been deeply interested in this particular phase of the subject, and probably at an early date will decide upon some definite classification which will be satisfactory to both pathologist and clinician.

In practically every patient suffering from Grave's disease one may find a certain amount of thyroiditis. In Case 5, I believe thyroiditis played a part in the postoperative development of myxedema.

DIAPHRAGMATIC HERNIA IN A CHILD. AGED ONE YEAR

A case of diaphragmatic hernia observed by P. E. Truesdale, Fall River, Mass. (*Journal A. M. A.*, March 14, 1931), is remarkable because of the extreme youth of the patient (one year) and her rapid and uneventful convalescence, which was due, in part, to operation undertaken while her condition was good.

ENDEMIC TYPHUS*

S. T. R. REVELL, M.D.
Louisville

Endemic typhus, or "Brill's Disease", may be defined as an acute specific disease characterized by an abrupt onset, and attended with nervous symptoms, muscular pain and weakness, maculo-papular eruption and high fever, which remains quite constant once its zenith has been reached, for about fourteen days.

The word "Typhus" is derived from Greek, and originally meant, fog, smoke or haze, but was used by Hippocrates to describe the condition of hebetude

History. The texts give little space to the description of endemic typhus but as many authors believe that the same causal agent is responsible for both the endemic and epidemic varieties, it seems meet that both types should be included in the history of one of the oldest or recorded diseases. Some of the cases reported by Hippocrates¹ strongly suggest the diagnosis of typhus, allusion to it in the Bible, under the caption of pestilence is frequently noted. Fracastorius² in the sixteenth century clearly describes this disease under the term "Febris pestilens", and to his wonderful description little has been added. It is a disease of poverty, adversity, filth and crowding, frequently following in the wakes of armies and its onslaught oft claims more victims than the casualties of war. Most of Europe has been desolated by its ravages; Ireland and England having been frequently and severely scourged. For doctors it has ever been a ready means of exit from this mundane sphere, claiming among its victims many of our most illustrious brethern, whose lives were given as martyrs to the cause of science and humanity.

Endemic typhus has been reported from Washington, D. C., and the following states: Mass., N. Y., Penn., Md., Va., Ind., Ill., Wis., Minn., Calif., and Georgia.

Etiology. Epidemics or typhus fever in times of peace have become almost impossible, because of our knowledge of its epidemiology. The endemic variety, like our old bed fellow poverty, is always with us, notably in several

Eastern cities of the United States. So frequently are these cases seen that doubt has crept into the minds of most clinicians as to whether the two varieties have a common cause, in spite of the painstaking bacteriologic and serologic work that has been done for the purpose of establishing the etiological identity of the two forms of typhus fever. The main reason for this doubt is contingent upon the life history of the body louse. It thrives best in cool weather and epidemic typhus is more frequently seen from November to April, while the endemic variety is decidedly more prevalent during the summer months.

For purposes of clarity it seems advisable to compare the arguments now advanced which have as their purpose the determination of the exact etiology of both varieties of typhus fever.

The bacillus typhi exanthematici which is the name given to the organism discovered by Plotz³ while working on endemic typhus, is a small rod shaped obligate anaerobic bacillus, which is usually straight, but may be curved or even like a coccus. It is Gram positive, non motile, not encapsulated or acid fast, and stains readily with ordinary aniline dyes. It grows best on faintly acid glucose ascitic agar media. Gohn⁴ recovered the bacillus from the blood of guinea pigs which had been inoculated with virulent typhus blood. This organism is found in the blood of both forms of typhus. Plotz states that it is present in the blood throughout the entire febrile period, and "specific agglutinins precipitins, opsonins, complement-fixing anti bodies and 'ana-Phylactic' antibodies are regularly present in the blood of typhus convalescents".

Despite the suggestive observations and conclusions of Plotz and those who agree with him, there has been a signal failure on their parts to produce the disease in animals by inoculating them with cultures of bacilli typhi-exanthematici, which were grown on artificial culture media.

There is one recorded instance of fever having been produced in a guinea pig by inoculation with artificial culture.

Since 1900 it has been known that the blood of epidemic typhus patients harbored the infectious agent, for it was in this year

*Read before the Medical Association of Georgia, Augusta, Ga., May 16, 1930.

that Miczutkowskii⁵ inoculated himself with the blood of a typhus infected patient and after an incubation period of eighteen days, developed the disease. This experiment was verified by Otero and Yersin.⁶ Nine years later Nicolle⁷ and his associates demonstrated that epidemic typhus could be transmitted to monkeys by inoculating them with typhus infected blood. They also produced the disease in monkeys by allowing them to be bitten by typhus infected lice.

The final link in the epidemiological chain was connected when the causative organism was isolated and found in the blood of epidemic typhus infected patients and in the stomachs and mid guts of the typhus infected body louse.

In 1910 Ricketts⁸ and Wilder, Anderson and Golberger confirmed the work of Nicolle et al., and also showed that the disease could be produced in guinea pigs by inoculation with typhus infected human blood. However, their crowning achievements were the discovery of minute bacillus-like bodies in the blood of patients ill with epidemic typhus fever. This observation has been repeatedly confirmed by numerous investigators.

While the discovery by Ricketts in 1910 of a minute bacillary body in the blood of a typhus patient was thought to be the cause of typhus fever, this belief was strengthened and gained a new impetus from the observations of Da Rocha-Lima who in 1916 detected in the lining of a louse's stomach minute intra cellular bodies which he regarded as being identical with the organisms found by Ricketts.

To which of the biological phyla they belong has not been determined. They are quite difficult to stain with ordinary aniline dyes but readily stain with a Giemsa, a ruby red color. They have been given the name *Rickettsia-Prowazekii*.

Wolbach and Todd observed that uncontaminated American lice after feeding on typhus infected patients in Poland regularly developed these intracellular bacilli-like bodies in the lining membranes of their stomachs. Weigle¹¹ by injecting uncontaminated lice through their cloacae with infected typhus blood, was able to reproduce similar intracellular bodies in the lining of their stomachs.

Lower, Ritter & Baehr¹² have reported the successful cultivation on artificial media of *Rickettsia-Prowazekii* bodies from the blood of human beings and animals ill with epidemic typhus fever. Late transplants of these cultures, months after the initial one, produced the disease in animals, clinically and pathologically indistinguishable from that produced by experimental inoculation with typhus infected blood, and which leaves behind it, immunity to subsequent inoculation with virulent typhus blood.

From these data it appears conclusive that the *Rickettsia-Prowazeki* bodies are specific organisms which produce epidemic typhus fever and if this inference be correct, the two varieties of typhus have different epidemiologies and each are secondarily infected with bacilli typhi-exanthematici.

There is no doubt that the body louse is the intermediate host of epidemic typhus, but, in the minds of most investigators there is an open question as to what is the intermediate host (if there be such) of the endemic variety.

Pathology. Most of the organs appear grossly normal. The spleen is generally enlarged, due to the swelling of the lymphoid follicles. The skin often shows petechiae. The essential pathologic changes have been described by Fraenkel¹³ as swelling and proliferation of the endothelial lining of the smaller arteries and capillaries in the corium, with perivascular round cell infiltration and tendency to the formation of hyaline thrombi. Similar changes have been noted in the brain and certain of the abdominal viscera.

The incubation is usually placed at twelve days but varies from nine to twenty.

Symptomatology. The onset is usually acute and frequently ushered in by one or more chilly sensations or even actual chills, attended with general aching. Headache and prostration are out of proportion to the other symptoms. Fever rises rapidly to 102 to 104, usually reaching its crest by the third day, where it remains with but slight variations until the crisis. Spleen is enlarged in more than half the cases. Constipation is the rule and generally quite marked. The face is flushed, eyes dull and conjunctivae injected. Delirium of a low muttering type may be

present together with hallucinations. The pulse is rapid and seldom dicrotic. The eruption appears on the fourth or fifth day, is maculopapular in type and dull red in color. It does not disappear under pressure, though the color fades. The extent of the eruption varies from a sparsely scattered rash to one that almost covers the entire surface. It is first seen on the upper abdomen, lower thorax, about the axillary folds, over back and extremities. Petchiae while not so common as in the epidemic variety are by no means rare. While the eruption is at first macular, in a few hours it becomes papular, and elevated about one or two m.m. above the surface, the individual spots varying in diameter from three or four m.m. to a centimeter. The eruption impresses one that it is a blending of "rose spots" seen in typhoid fever and the rash of measles. After lasting for about fourteen days the fever declines, generally by crisis, the rash fades and convalescence ensues.

Osler,¹¹ in describing the symptoms of epidemic typhus, calls attention to the observations of some authors, who mention the existence of a distinctive odor which they detected in the epidemic variety. In the case of the writer's there emanated from the patient a most peculiar musty, funky, penetrating odor, despite a fastidious cleanliness on the part of the patient. So permeating was this effluvium that its existence was at once detected on entering the patient's room.

Prognosis. In uncomplicated cases the mortality is slight, about one-fourth of one per cent. Broncho pneumonia is the most likely complication and its co-existence materially increases the mortality.

Diagnosis. This is based upon the severe and persistent headache, rapid pulse, prostration, eruption, with rapid development of fastigium, a sudden subsidence of all signs and symptoms on about the fourteenth day, and the Weil-Felix¹⁵ reaction. In 1915 Weil and Felix discovered in the urine and stool of a typhus patient a proteus like bacillus, which was agglutinated by the serum of a typhus patient. These organisms are saprophytes and have nothing whatever to do with typhus fever; apparently just a biological freak. A certain strain of these bacilli known as proteus X 19 are used in laboratories for purposes of the agglutination test.

Dilutions of 1 to 100 and above are considered positive and the same agglutination phenomenon is seen in both varieties of typhus fever.

Differential Diagnosis. This should be made from typhoid fever, measles, purpura and leukemia, particularly of the acute myeloid type.

The State Board of Health very kindly furnished me with the following data:

Through December, 1929, 490 cases of endemic typhus had been reported.

Dr. Paullin reported the first case in 1914, and his was the first reported from the entire Southeastern section of the United States.

Prior to January, 1930, from all points north of a line through Macon and extending east to the Savannah river and west to the Alabama border only 82 cases were reported. No case has been reported from any of the boundary counties along the northern border of the state, nor any along the eastern border north of Richmond county.

Through December, 1928, 271 cases were reported from Chatham county.

From these data it may be seen that 83.07% of all reported cases have been from sections south of the center of the state.

A study of the geographic distribution of reported cases focuses one's thought on this fact: there is a striking parallelism between the incidence of malaria and endemic typhus. Would it be going too far afield in the realm of speculation to infer the possibility of the coexistence of some biting insect closely akin to the mosquito, as the intermediate host of endemic typhus?

REPORT OF CASE

Mr. C. E. M., age 43, married, occupation farmer, consulted me May 29th, with the complaints of headache and fever, which had existed for sixty hours.

Temperature 100.7, pulse 90, respiration 22. Physical examination: face flushed, eyes injected, eyegrounds appeared normal, pupils moderately dilated and reacted to light and accommodation, no Kernigs or Babinski, spleen moderately enlarged; condition otherwise negative.

Blood examination:		Urine analysis:	
W. B. C.	6040	Reaction	Acid
Hemoglobin	100	Specific Gravity	1023
Poly's	80	Albumin	one plus
S. L.	12	Sugar	negative
L. L.	4	Diazo	positive
Transitional	2		
Basophiles	2		

On June 2nd, when patient was next seen, temperature 102.5, pulse 104, respiration 22. Body was rather widely covered with a macular rash, which resembled measles. The rash faded, but did not disappear under pressure. There was a distinctive odor about patient and spleen was still enlarged. Physical examination otherwise negative.

Blood examination:		Urine analysis:	
W. B. C.	7500	Reaction	Acid
Poly's	82	Specific Gravity ..	1.023
S. L.	15	Albumin	one plus
L. L.	2	Sugar	negative
Transitional ..	1	Diazo	positive

There was little change in his condition save for the development of numerous petechiae until June 10th, when his temperature became normal and remained so for three days. On June 13th he developed pain in right shoulder, right costo vertebral angle, and became tender over right upper abdominal quadrant; temperature 99, pulse 83. On June 16th he had shooting pains in various parts of body; slight cough. Breath sounds were slightly diminished at right base. There was some impairment of resonance over corresponding area; temperature 100, pulse 96.

Blood examination: Poly's 56, L. L. 37. Total not made and differential not completed. June 17th, pains were rather limited to right side of thorax. Fine, moist rales below angle of right scapula; diminished breath sounds; increase in dullness over same area; small amount of blood streaked sputum; temperature 102, pulse 120, respiration 36. Temperature reached normal on June 19th and remained so thereafter. Owing to my familiarity with "the old man's friend", the complication of broncho pneumonia was readily recognized. But on June 20th, the day before the patient was dismissed, the State Board of Health made for me the diagnosis of endemic typhus. Long live the State Board of Health.

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USE OF VITAMIN B IN DIETS OF INFANTS

Wheat germ and yeast in the form of dried powdered watery extracts when added in the proportions of 1 gm. of wheat germ extract and 0.5 gm. of yeast extract to 1 ounce of a preparation of maltose and dextrin and fed to infants, by B. Raymond Hoobler, Detroit (*Journal A. M. A.*, Feb. 28, 1931), caused no appreciable gain in weight over controls who were fed on similar formulas without vitamin B additions. Infants given vitamin B additions showed a greater growth in recumbent and stem length than controls not given the vitamin B additions. About one out of six of the infants studied showed symptoms of rigidity. This symptom disappeared in all but six of the cases, indicating that the quantity of vitamin B needed by infants differs greatly, and that one should bear in mind that while the amount of vitamin B in the commercial carbohydrate preparations may be sufficient for certain infants, there are others who will require larger quantities.

TULAREMIA*

S. E. SANCHEZ, M.D.
Barwick

Tularemia, although a comparatively new disease, is prevalent in all of the Western and Southern States. This disease should be classed as one of our common diseases. In addition to its recognition in this country, it has also been recognized abroad.

Tularemia occurs in nature as a fatal bacteremia in ground squirrels and various species of rabbits and other rodents. The disease, is not found in man primarily, being transmitted to man by the bite of infected blood-flies, ticks, bed bugs and by contamination of the hands coming in contact with the flesh of infected rodents.

A study of tularemia was begun by the United States Public Health Service in 1910.² In this report the disease was named tularemia on account of the presence in the blood of the causative organism, "Bacterium Tularensis". It was so named by McCoy and Chapin³ as the cause of the fatal epidemic among ground squirrels in Tulare County, California.

The first case of tularemia was described by Dr. Ancil Martin in 1907, though he probably recognized a case in 1902. Doctor Martin reported three persons having the primary lesions about the eye; small abscesses formed in the lids and on the conjunctiva as well. In one case the cornea was involved. The illness was not profound, and there were no deaths. This was four years before Doctor Frances made his studies of "Rabbit Septicemia", and developed the diagnostic agglutination tests in the laboratory of the United States Public Health Service.

The following report has been worked out by Doctor Frances: Bacterium Tularensis, the causative organism in tularemia is a small, pleomorphic organism, occurring in bacillary and coccoidal forms, both in tissues and in cultures. A bi-polar form occurs in certain cultures. The organism is gram-negative, non-motile and non-spore bearing, it grows only under aerobic conditions, its optimum p.h. range is between 6.8 and 7.8,

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it ferments glucose and glycerol, forming acid but no gas, it grows well on coagulated egg yolk and glucose cystine agar, but not on ordinary laboratory media such as plain bouillon. Additional efficient media are serum glucose agar, glucose blood agar, and blood agar, each having been enriched by rubbing over its surface a piece of fresh sterile rabbit spleen which is allowed to remain on the medium.

In cover glass preparations from tissues and cultures the organism stains with ordinary dyes, but preferably with aniline gentian violet. In section of tissue it stains well with Malloy's eosin and methylene blue and with Giemsa solution, preferably the latter. Sterile Berkefeld filtrates of virulent cultures are non-toxic to guinea pigs. In three of eight attempts it passed through Berkefeld filters which held back a small staphylococcus.

Tularemia is most often found in rural districts, in the families of farmers; also hunters are often infected. Laboratory workers are frequently infected. In them the disease is usually of the typhoid type. Negroes are not as susceptible to tularemia as white people.

Even, Green and Wade claim that there is a possibility of a natural exchange of the disease between the rabbit and the grouse. They claim that experiments show that the ruffed grouse succumbs to an infection of the bacterium *tularensis* with more regularity than the guinea pig and the rabbit. There is no doubt that it may be found in other fowls such as the goose, the chicken, and the quail.

Tularemia is not contagious but infectious. One attack confers immunity.

Tularemia is classified in four different types: Ulceroglandular, Oculoglandular, Glandular Typhoidal.

In the ulceroglandular type the initial lesion is a small granular papule mostly found on the finger at the site of infection. In three or four days the papule sloughs off, leaving a hard, rough, uneven surface. The lymph glands are involved in this condition, frequently the regional axillary and epitrochlear glands.

The oculoglandular type shows a severe

conjunctivitis, the glands on each side of the neck and arm pits become involved.

In the glandular type lesion and the portal of invasion is not found. This type has been mistaken for typhoid and malaria and undulant fever.

The typhoidal type has no skin lesions or glandular involvements. The diagnosis of the infection is made only by the agglutination test, this test being positive about a week after the onset of the symptoms.

The diagnosis is easily made if one can get a complete history of the disease. With this history one can eliminate malaria, typhus, typhoid, other septicemias, and undulant fever. One can almost be sure of his diagnosis from the clinical picture. If any doubt arises it can be settled positively by the agglutination test of the blood serum collected from the patient during the latter part of the second week, or by inoculation of the guinea pig. The agglutination test has proven positive in tularemia for many years following the disease.

Doctors Fulmer and Kilbury isolated bacterium tularemia from a case of peritonitis. This germ was carried through eighteen guinea pigs in two months time. All animals were examined, and post-mortem cultures were made. During this time antiseptic precautions against infection were taken in the laboratory without infection to the laboratory workers.

Treatment consists of rest in bed, good nursing and the general routine. If suppuration occurs in the gland it should be incised. There is up to the present time no curative serum for this condition.

CASE HISTORY

Case 1.—C. B., age 36, a farmer, dressed a rabbit January 25, 1928, and while cutting it up he stuck a broken bone in his thumb. In three or four days he became ill; had a chill, headache, and night sweats. He consulted his family physician on January 29th. He had a bad sore on his thumb, causing a gland under his arm to enlarge. He came to my office January 30th. When I examined him I found the temperature at 104. The patient complained of soreness and aching, also of a headache. The case was diagnosed as tularemia.

Case 2.—A. A. C., age 38, wife of farmer, while dressing a rabbit, scratched her finger with a bone; also on March 2nd, the day following, at the woodpile, where she had dressed the rabbit, she stuck a splinter in her hand. Three days later, March 5th, she

became ill, having a chill and headache. She treated herself for common cold for three or four days. I saw her on March 7th. She had an abscess of the right epitrochlear gland and enlarged axillary and cervical glands on that side. The absorption of all enlarged glands took place without abscess. The patient was sick in and out of bed for about three weeks. Her case was diagnosed clinically as tularemia.

Case 3.—N., a boy, 18 years old, came to me for treatment on March 23, 1928. He had been rabbit-hunting three days previously, and while dressing the rabbits stuck a bone in his thumb. After two or three days he developed fever, general malaise, loss of appetite, and became sore in region of right axilla, over axillary glands, also epitrochlear glands. Temperature 102 to 103.5 for about three weeks, gradually subsiding.

The axillary glands suppurred. Pus was examined in the laboratory and showed the following finding:

The pus was transferred to coagulated egg-yolk media; after seventy-two hours smear was made and we obtained a gram-negative bacillus identical with that described by Stitt. This smear was also examined by Doctor Lippman in his laboratory in San Francisco and was diagnosed as bacterium tularense. Some of the pus was transferred to sterile calf liver and put under a setting hen to keep at even temperature for seventy-two hours. A smear was made from this liver and we obtained a gram-positive bacilli and cocci as found by Doctor Asbury in two of his cases.

In two months the boy returned to school.

Case 4.—Mrs. S. N., age 36, became infected through a very small abrasion on the finger from washing a skinned rabbit.

This case ran high temperature of an irregular type for three weeks. All the regular symptoms, chill, general malaise, began about the third day. The patient had an urticarial eruption on hand and arm about ten days after onset of lesions.

Case 5.—Mrs. H., age 44, became infected April 1, 1928 in the eye, two days after she had handled rabbits that were cleaned by tenants.

Her lids were swollen, and she had a small abscess of the lids and tear sac and a corneal ulcer was noted. The systemic symptoms were the same as in all other cases mentioned.

Case 6.—Mrs. M. M., age 24, stuck a small bone in her index finger on the left hand on January 26, 1930, while dressing a rabbit. On February second she had a sudden rise in temperature, and she had an intense aching and headaches. Three or four days later she had an adenitis in the left axilla. A papule developed at the site of infection, leaving a sloughing ulcer, very sensitive to pain. She had a very prolonged convalescence.

The axillary glands remained enlarged and very tender but did not suppurate, and disappeared in about three months. There was no soreness or enlargement of the epitrochlear glands. The diagnosis was tularemia and this was confirmed by the agglutination test being positive in dilutions 1:320.

Case 7.—Mrs. M. L., age 47, became ill January

28, 1930, and ran a high temperature, having intense pain throughout the body, and vomiting. Examination showed axilla adenitis on the affected side above and below the elbow. There was a small cut on one of her fingers on the left hand and inquiry showed she had dressed some rabbits three or four days previously. The onset of the symptoms were January 28, 1930, and she had a decided involvement of the epitrochlear glands which disappeared in about 6 weeks. The agglutination test was positive for tularemia in dilutions of 1:40. This woman made a slow recovery.

Case 8.—F. W., schoolboy, aged 13, became infected while handling a rabbit on May 26th. He had a small abrasion on the left hand and the epitrochlear and axillary glands became involved. The latter became suppurated about one month thereafter, and were incised. His case was immediately diagnosed as tularemia, but confirmed at once by the agglutination test being positive in dilutions 1:60.

Case 9.—G. T., a 12-year-old girl became suddenly ill July 1, 1929, having a chill and general malaise. She was brought to the office July 5, 1929, with a swollen foot. Upon inquiry she stated that she was bitten by a yellow fly three days previously. She was put to bed and kept there for a few days with an irregular type of fever. The inguinal glands were enlarged.

This case was diagnosed clinically as tularemia, but was never confirmed by the agglutination test. She was sick for a period of three or four weeks with a gradual subsidence of the inguinal glands of the side.

Summary

A peculiar characteristic in all my cases was that the course was similar to that of "flu". In all these cases blood smears were taken and tests were made for typhus, syphilis, and malaria, and complete blood counts were made. We found a high white blood count even at the beginning and it remained from 14,000 to 20,000.

In Case 3, the abscess was incised and a culture made therefrom, on egg-yolk media. This was kept at an even temperature under a setting hen for seventy-two hours. There were found under the microscope the identical organism of tularemia.

Examination of several rabbits, brought to the laboratory for liver and spleen examination, showed a spotted liver and spleen, with nodules on them. In some instances the liver was enlarged and there were necrotic areas. The dead rabbits were placed in the chicken yard, where there were four dozen chickens of all sizes. The chickens succumbed to the disease within two or three days.

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DISCUSSION ON PAPER OF DR. SANCHEZ

Dr. E. C. Thrash, Atlanta.—Tularemia is not a new disease but has only recently been discovered. It is transmitted through quite a number of animals and has been found in almost every State in the Union. It has recently been reported from Russia. O'Hara worked out a disease and observes that it is the same as tularemia and O'Hara, to convince himself of the fact, inoculated himself and concluded that it is the same disease. It is transmitted from one tick to another, and it is hereditary from the eggs. This should be remembered.

The disease is acute and chronic. The fulminating types do not react to the tests as do the chronic ones. In most of the fulminating types there has been little reaction.

There are three types, ulcerative, glandular, and typhoid. These three forms may all exist in the same patient at the same time, but the outstanding types are the ulcerative and glandular, combined or separate. The ulcer commonly occurs about the hands and the adjacent glands become infected first. If the infection is very serious it will drift into the typhoid state. Some cases have been reported in which a rabbit was dressed and the hand not traumatized at all, but several days later the hand was injured and an ulcer formed at the site of injury. This has been reported as long as twenty-six days following the dressing of a rabbit, and this type always results three to five days following a trauma of the hand, where the bacteria have become imbedded in the skin and rest there until they have an opportunity to invade the tissues through the abrasion.

Dr. A. J. Mooney, Statesboro, Ga.—While we have had tularemia with us for a long time it remained for Tulare County in the State of California to bring the attention of the medical profession to this disease, which has been so splendidly set forth by Doctor Sanchez in his paper, and illuminated further by the discussion of Doctor Thrash.

The diagnosis should be easy, and yet I know of a splendid doctor who had a couple of patients with a lesion on the hand to which he attached little importance. Then they were nonplused by a peculiar temperature and a disease that was running an unusual course, until one morning the parents of the patients called up the doctor and said they had been reading about "rabbit fever" and believed their boys had this disease, which proved correct. There is in these cases nearly always a history of having dressed a rabbit, which has always been infected by a tick. The lesion is characteristic, hard and nodular, with

a tendency for extension of the infection up the affected extremity. Nature is always on the job by enlarging the first gland in the line of defense. Therefore, the epitrochlear glands are enlarged more in this condition than in any other.

Therefore, bear in mind, with the history of an infection and lesion and the observation of enlargement of the epitrochlear glands, with a tendency to extend on to the axillary glands, and this should make us suspect tularemia.

Dr. S. E. Sanchez, Barwick, Ga., (closing).—I appreciate this discussion very much, and wish to state that this disease is the only one that has been worked out from beginning to end by American doctors. Doctor Francis is responsible for this work.

BREAST CANCER*

WM. F. LAKE, M.D.

A. J. AYERS, M.D.

Atlanta

"The ancients knew cancer well. They treated it by excision and by a variety of escharotics, including the Egyptian arsenical ointment. Cancer is mentioned in the Papyrus Eber (B. C. 1500) and in the oldest remnants of the literature of India and Persia." This is the first paragraph in the well-known James Ewing "neoplastic Diseases", third edition. The ancient physicians studied, diagnosed, and treated cancer, and the medical men of today have not made any great improvement over our ancient brothers, for we still practice excision and advocate this old method for a cure of a dreaded disease.

Cancer of the breast is a deadly disease and presents a great many problems. In the history of medicine, fewer problems have received more persistent and thorough investigations than the many problems of breast cancer. The literature has increased enormously in volume and importance, and today we find many learned researchers working on the unsolved problems in well-organized clinics and institutions.

Fifty years ago Virchow and Muller laid the foundation for the study of cellular pathology and for many years following their work, there was little advancement made. The pathologist had failed to advance his knowledge of disease.

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In 1905, Wilson of the Mayo Clinic, described the method of frozen section. Primarily, this method was to aid the pathologist in making a quick diagnosis. Today this method is being used to study the cell, marking a great advancement in cellular pathology and of inestimable value to the pathologist, the surgeon, and the patient. This work that Wilson began has developed into a detail study of the cell and today the pathologist has a better understanding of the normal as well as the malignant cell.

The death rate from all forms of cancer has been on a gradual increase. Statistics reveal this depressing fact. It is estimated that ten per cent of the human race is doomed to die of cancer, an alarming situation to face and a challenge to all medical men who have no solution of any real value to the problem. Frederick L. Hoffmann tells us that the death rate for cancer in the United States for the year 1928 was higher than for the year 1927; statistics covering ten states during the years 1900 to 1920 shows a steady increase in the mortality rate of all forms of cancer. The death rate in England is higher than in the United States. Denmark has the highest death rate of any civilized country. With a disease like cancer and a gradual increase in the death rate, what can be done that would be of material aid in bringing about a decrease?

The American Society for the Control of Cancer, the State Board of Health, and our State Medical Association, has had the attention of the public focused on mammary cancer to such an extent that both the doctor and the laity have become better educated. Most women seek the advice of their physicians much earlier than they did twenty years ago. The significance of the small lump or lumps in the breast is generally recognized by the layman and the doctor as well, but further and continued effort to educate the public is needed.

There has been improvement as we do not see the large and advanced cancer of the breast that we did some few years back. The tumors of the breast that we see today are smaller and a larger percentage are benign growths. The common affections of the breasts are acute inflammation, chronic mastitis, and tumors. A large per cent of all tu-

mors of the breast fall into three groups—fibro-adenoma, carcinoma, and chronic mastitis. In our studies chronic mastitis constitutes a large per cent of all breast tumors. The relationship of chronic mastitis to carcinoma is most interesting. No one has ever proven that chronic mastitis was the cause of mammary cancer, however, surgeons now regard chronic mastitis as a dangerous and precancerous condition. Ewing and many others believe that chronic mastitis is a precancerous condition and should be treated as such. Bloodgood in 1900 reported eighty per cent of all breast tumors malignant and in the year 1929, only seventeen per cent of all breast tumors were malignant. This is a tremendous reduction in the percentage of mammary malignancies. This has been brought about largely by the public being educated, and there are other workers who have shown equally as good results as Bloodgood.

The woman over thirty-five years of age with a nodule in the breast, movable or fixed, a bleeding nipple, an eczema, or a localized non-traumatic pain, requires immediate investigation, and when every woman over thirty years of age reports within two months after her first warning by any sign or symptom in one or both breasts, the actual percentage of breast cancer will be markedly decreased.

One of the most important factors of breast cancer is an early diagnosis, for the greatest chance of a cure is in the early stage of malignancy. Metastasis may take place early and involve vital organs. The clinical features are often the same, and yet the histological structure is widely different. An incapsulated adenoma or a chronic mastitis may become malignant in a short time or prepare the field for a malignant growth. Therefore, time is a valuable factor in the prognosis of any tumor, benign or malignant. The general practitioner is the one who should be an authority in the diagnosis and management of malignant growths, for it is he who sees the victim for the first and last time.

The more we all know about cancer clinically and historically, the better will be our results. There are many clinical features that are extremely important and must be considered in malignancy of the breast: The age and condition of the patient are very im-

portant factors. Malignancy of the breast occurring early in life or during pregnancy is as a rule highly malignant and rapidly fatal. Many of the less malignant tumors of the breast are seen in the aged and those after middle life. Location, size, glandular involvement, and duration of the tumor are of much value in giving a diagnosis and directing treatment. In all cases, it is important to have all the clinical history that can be furnished, but often, the pathologist will know nothing of the clinical history and still less of the patient's physical condition or findings in general. The burden is thrown on the pathologist and often involves a heavy responsibility, especially when it is remembered that very often all the information that he has must come from the small section or bits of tissue.

The pathologist or surgeon may make a tentative diagnosis and prognosis from the clinical findings alone, but a much more accurate diagnosis can be had from a detailed histological study of the tissue. Prognosis, based on a clinical study, should be discouraged. A tumor that is very cellular and vascular is certainly more malignant than one which shows a large amount of fibrous tissue and a few scattering cells. Tumors that consist of a large percentage of differentiated cells are certainly less malignant than one with only a small number of differentiated cells. Undifferentiated cells, and mitotic figures are histological structures that speak strongly for highly malignant tumors. Broders in 1920, endeavored to make a histological prognosis in each individual case, and he placed tumors in four groups. The basic idea was, that the more highly differentiated the tumor cells are, the lower is the malignancy.

In 1925 a similar study was undertaken in carcinoma of the breast by Greenough. His classifications or grouping, representing low, medium, and high grades of malignancies. The chief histological study was the adenomatous structure with especial attention to the less retention of glandlike structures, secretory activity of the cells and the nuclear changes.

McCarty speaks of four histological factors of prognostic importance—lymphocytic infiltration, fibrosis, hyalinization, and cellular differentiation. The first three factors are

relating to the reaction of the tissue in close contact with the neoplasm. The cellular differentiation assumes the greatest prognostic significance of the four factors.

Pathologists and surgeons have for some time recognized the great value of grouping all neoplasms of the breast and it is generally agreed that fairly reliable and definite prognostic interpretations may be drawn from a careful histological study based upon cytology. Broders and Greenough have shown the best results in group one, and in group four no good results were obtained. The patients in group four had very little chance of a cure. The grouping sometimes saves the patient from a mutilating operation and in all cases, a better prognosis can be given the patient and the family. The future treatment can be directed for the good of the patient. The time is not far off when all surgeons will demand a grouping of all neoplastic growths.

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 Editorial: *International Med. Digest*, 15:118 (August) 1929.

TREATMENT OF INTERMITTENT CLAUDICATION WITH HYPERPYREXIA PRODUCED BY BATHS

H. G. Mehrtens and P. S. Pouppirt, San Francisco (*Journal A. M. A.*, Dec. 20, 1930), aver that hyperpyrexia baths, because of their safety and simplicity of administration, have a field of usefulness in early cases of vascular disease with symptoms of intermittent claudication. Even in the more severe cases this therapy may find a place because sympathetic ganglionectomy, as well as the use of intravenous hypertonic saline solution, is recommended chiefly in selected cases of Buerger's disease. Arteriosclerosis with calcification is infrequently benefited by the foregoing procedures they describe, but hyperpyrexia has in the authors' experience proved worthy of trial. The milder cases offer the better chances of improvement. Cases in which gangrene has already taken place show no amelioration.

DISLOCATION OF THE SHOULDER

CLAY RAY MURRAY, New York (*Journal A. M. A.*, Jan. 31, 1931), calls attention to the common faults in the care of the ordinary type of dislocation of the shoulder as observed in a fracture clinic, and the results as reflected in prolonged convalescence and even permanent disability.

FINDINGS IN EIGHTY-FIVE HEALTH EXAMINATIONS*

Conducted by the Crisp County Medical Society

GUY G. LUNSFORD,† M.D.
Cordele

The achievements of the medical profession in the first thirty years of the twentieth century have been many and great. New knowledge acquired about a host of ills that befall the human family has been astounding in amount and of untold benefit to humanity in the alleviation of suffering and in actually saving and prolonging life.

The feeling of helplessness which a few years ago possessed the physician when certain diseases had been diagnosed has been replaced, by this newer knowledge, by a feeling of assurance that, with the application of new principles and treatments, he will be able to conquer the disease condition. But, great as have been the achievements in curative medicine, to my mind, the greatest good has been accomplished in preventive medicine. Truly it is here that "an ounce of prevention is worth a pound of cure".

A feeling of just pride pervades us when we think of our accomplishment of increasing the average span of human life and that the baby born today may reasonably expect to live 15 or 20 years longer than if it had been born a few decades ago. That only about six babies of every hundred that are born now will die before its first birthday when only a short time ago, within the memory of those now living, at least 18 of every 100 babies born failed to have a birthday, fills our hearts with gratitude and pride in the achievements of modern medicine.

Preventive medicine in Georgia has brought about a decline of 87.5 per cent in typhoid fever and 44 per cent in diphtheria. Tuberculosis is exacting an ever-decreasing toll of our people. These and many other accomplishments of our loved profession have been of priceless benefit to humanity.

While we may now say to the infant that he has a better chance to reach manhood than

did his cousin born a few decades ago, what can we say to him about his chance of long and useful manhood? When he has reached his majority and has completed his preparation for his chosen career, can we still say to him that he has a longer period of real usefulness and productivity than had he lived in the years gone by? When we know that each year the so-called degenerative diseases of adult life are taking a greater and greater toll of our manhood and that the fourth and fifth decades are more dangerous as the years pass, what can we promise him?

Some one has estimated that the average cost of bringing a child to the age of maturity is about \$15,000 and some one else has said that, economically, one adult is worth several children. If these statements be true, what are we doing to protect the men and women of our country from the dangers of adult life?

The results attained in reducing the mortality rates of infancy and childhood have been brought about not alone because of the fact that the doctors of our land know more, but, in the opinion of many, because this knowledge has been passed on to the laity, and a general educational campaign, to teach men, women, and children rules of hygiene and sanitation and the value of protective vaccines and sera, has been the means to the end accomplished.

If, then, education has accomplished so much for our younger population, how fitting that this same method be applied to the benefit of those at the other end of life!

In the opinion of the writer, one of the most salutary movements inaugurated by the Medical Association of Georgia in recent years is the Health Education Week, which was observed in nearly one hundred counties the first week of May this year. And those responsible for it should receive the thanks of everyone. For several years "May Day" has been "Child Health Day", and it was a great thought to extend this to a whole week and include the adult population of our state in the program, and the very large number of county societies that participated in this program demonstrates that a vast majority of our physicians are vitally interested in doing their part in this great work.

The "ounce of prevention" can be applied.

*Read before the Third District Medical Society, Vienna, Ga., June 18, 1930.

†Commissioner of Health, Crisp County.

Age Group	Number Examined	Teeth	Vision Uncorrected	Eyes, Not Vision	Nose and Throat	Heart	Blood Pressure, High	Blood Pressure, Low	Chest	Hernia	Abdomen	Kidneys
17-19	5	4	3	0	4	1	0	1	0	0	0	3
20-29	5	2	1	1	4	0	0	2	1	2	0	3
30-39	4	2	0	2	3	0	1	2	0	1	0	1
40-49	15	9	6	5	10	5	2	5	2	0	1	7
50-59	3	1	3	1	3	1	0	3	0	0	0	0
60-69	6	1	3	3	3	1	2	2	0	1	0	3
70+	3	3	2	2	1	1	0	1	0	0	0	2
Total (A)	41	22	18	14	28	9	5	16	3	4	1	19
		Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
17-19	5	80	60	0	80	20	0	20	0	0	0	60
20-29	5	40	20	20	80	0	0	40	20	40	0	60
30-39	4	50	0	50	75	0	25	50	0	25	0	25
40-49	15	60	40	33	66	33	13	33	13	0	7	47
50-59	3	33	100	33	100	33	0	100	0	0	0	0
60-69	6	17	50	50	50	17	33	33	0	17	0	50
70+	3	100	66	66	33	33	0	33	0	9	0	66
Total (B)	41	54	44	34	68	22	12	39	7	10	2	46

Table I (A). Number and character of defects found in examination of forty-one white males in Crisp County, Georgia, Health Clinic, by age groups. (B) Percentage of defects in same group.

to many of the so-called degenerative diseases as well as to others in which it has been so beneficial, but to be effective, with our present knowledge, must largely anticipate the condition by several years, and we must in most of these conditions apply the slogan, "A stitch in time saves nine." Our people must be taught that cancer, tuberculosis, diabetes, nephritis, heart disease, etc., if discovered in time and the proper measures instituted, do not mean certain early death, as was generally supposed a few years ago, and that, being without symptoms in the early stages, the only way to apply the "stitch in time" is to institute a regime of annual or semi-annual health examination.

It would be of much interest to know how many Georgia counties that observed this Health Education Week held health examination clinics and how many availed themselves of this opportunity to "check up" on their physical condition. Of equal or greater interest would be a tabulation of the conditions found in the examination of these supposedly healthy people. We hope that the number examined was large and that such tabulations have or will be made and pub-

lished so that we may have a better idea of the physical condition of our people.

To this end, at the request of members of the Crisp County Medical Society, I am reporting to you in tabulated form the findings in the examination of 41 men and 44 women examined by members of our society during this week. Only a few of these people supposed that they were "sick" and so, although the number is small, they may be considered a fair "cross section" of our population. No effort has been made to enumerate the defects, but merely the organs that were defective. To illustrate—defects of teeth may mean one or a dozen decayed teeth with pyorrhea added; a defect of nose and throat may mean a deflected septum, infected tonsils and post-nasal catarrh; and so on.

In conducting the examination the history was taken by one doctor, examination of chest (lungs, heart, and blood pressure) by one or two others; the abdomen, lower extremities, and, in married women, the pelvic organs, by still others, while another examined the head, with a dentist looking after the teeth and gums.

Age Group	Number Examined	Teeth	Vision Uncorrected	Eyes, Not Vision	Nose and Throat	Heart	Blood Pressure, High	Blood Pressure, Low	Chest	Abdomen	Kidneys	Uterine Displacements	Perineal Tear	Cervical Tear	Cervical Erosions	Cervicitis
20-29	12	5	8	0	10	1	1	5	0	0	2	1	2	3	3	2
30-39	14	3	9	0	8	1	0	7	1	1	3	1	2	5	5	4
40-49	9	3	6	2	7	2	3	5	0	0	1	5	3	1	1	2
50-59	8	1	8	1	3	4	1	5	0	0	0	1	4	1	2	1
60+	1	0	1	0	1	0	1	0	0	0	1	0	1	0	0	0
Total (A)	44	12	32	3	29	8	6	22	1	1	7	6	12	10	11	9

		Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
20-29	12	42	67	0	83	8	8	42	0	0	17	8	17	25	25	17
30-39	14	21	64	0	57	7	0	50	7	7	21	7	14	36	36	28
40-49	9	33	66	22	77	22	33	55	0	0	11	55	33	11	11	22
50-59	8	12	100	12	37	50	12	62	0	0	0	12	50	12	25	12
60+	1	0	100	0	100	0	100	0	0	0	100	0	100	0	0	0
Total (B)	44	27	73	7	66	18	14	50	2	2	16	14	27	23	25	20

Table II (A). Number and character of defects found in examination of forty-four white females in Crisp County, Georgia, Health Clinic, by age groups. (B) Percentage of defects in same group.

	Teeth	Vision, Un-corrected	Eyes, Not Vision	Nose and Throat	Heart	Blood Pressure, High	Blood Pressure, Low	Chest	Abdomen	Kidneys
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Women	27	73	7	66	18	14	50	2	2	16
Men	54	44	34	68	22	12	39	7	7	46
Combined	40	59	20	67	20	13	45	5	2	31

Table III. Comparison by sexes of percentage of some defective organs found in examination of forty-one men and forty-four women in Crisp County, Georgia, Health Examination Clinic, May, 1930.

Table I (A) shows the number of men examined in each age group and the number in which certain organs were found to be defective and (B) shows the percentage of the same groups. Table II shows the same thing with reference to the women, while Table III shows a percentage comparison between the sexes.

Laboratory reports from specimens sent to the State Board of Health shows a negative Wassermann in each case. Blood smears from every person failed to show the presence of malaria plasmodia. Feces of only three males age 19, 26 and 46 showed eggs of hookworms. One male was found to have a small epithelioma just above the ear.

These tables show the following: 1. Men and women of Crisp County seem to be about equally interested in their physical well-being. 2. More YOUNG men than YOUNG

women presented themselves for examination. 3. Defects of the teeth, eyes (other than vision), heart and kidneys are more prevalent in men than in women, while the women showed more uncorrected defects of vision and more of them had a blood pressure either too low or too high. 4. The percentage of low blood pressure (below 110 mm. for all under 35 years old and below 120 mm. for all above 35) was more than 3 times as large as for high blood pressure (above 160 mm. was considered high for any age; below 40 years of age the normal was considered to be 100 plus one for each year of age; 10 mm. above this was considered high). 5. When urinalysis showed either alubumin, casts (any kind) or MANY pus cells, it was classed as a defect of the kidneys, and nearly three times as many men showed such defects as did women, and reached the astounding figure of

46 per cent. 6. Seventy-three per cent of the women examined had defects of vision that were wholly or only partially corrected. 7. Of the 34 women who are mothers, 35 per cent has unrepaired tears of the perineum beyond the first degree; 29 per cent had lacerated cervixes; 32 per cent some degree of cervical erosion, and 26 per cent had either cervicitis or endocervicitis. Do you wonder that one out of every eight mothers above the age of 35 die of cancer?

The writer has watched with interest the reaction of those examined and is pleased to say that a large number in whom defects were found have taken them seriously and he hopes to be able to follow up these cases to see if the advice given them by the committee was followed.

The campaign of education of the adult population on health matters as they pertain to it which has been started with such promise of good results should be persistently followed up, along with that for the care of the infant and child population and maybe in the near future we of Georgia will raise our average age at death from 58 years, at present, to equal that of New Zealand which is 65 years.

RENAL CARBUNCLE

THOMAS D. MOORE, Memphis, Tenn. (*Journal A. M. A.*, March 7, 1931), states that carbuncle of the kidney is an unusual clinical entity evidently often overlooked because of its frequent association with perinephric abscess, and further because of the difficulties in many instances of a definite diagnosis. The detailed observations from a study of forty-two collected cases are presented and five additional ones are reported. The chief clinical features of the disease are as follows: There is (a) a recent history of a suppurative lesion, such as a furuncle or a carbuncle. (b) From three to five weeks later, dull pain appears in the region of the affected kidney, associated with local tenderness, fever and sweats. Rigors may or may not occur. (c) The laboratory data usually includes practically a negative urinalysis, moderate leukocytosis and a positive culture of *Staphylococcus aureus* from the affected kidney, the function of which may be moderately diminished. (d) Pyelography reveals no characteristic changes and may simulate a picture of a renal neoplasm. (e) Surgical intervention is usually imperative, nephrectomy being the treatment of choice. In cases complicated by perinephric abscess, preliminary drainage is desirable prior to nephrectomy.

FUNDAMENTALS OF X-RAY THERAPY*

B. LESTER HARBIN, M.D.
Rome

Thirty-five years ago while carrying on scientific investigations relative to the curious behavior of high potential electricity in a rarefied atmosphere, William Conrad Roentgen discovered the x-ray. Roentgen in using a Crooke's tube enclosed in a cardboard box, noticed that crystals of platino-cyanide of barium lying at some distance fluoresced. He then placed different objects between the source of radiation and the barium salts and soon ascertained that the mysterious invisible radiation penetrated any material according to its density. Being unable to determine the exact nature of the new radiation he called it the X-Ray. By suitably protecting photographic plates from ordinary light he was able to obtain shadow-graphs of various objects including an image of his own hand. This was really the birth of Roentgenography. At the same time he coated a piece of cardboard with an emulsion of barium-platino-cyanide, and used it as a fluorescing screen. Practical applications were immediately instituted. While doing this practical work physicians noticed that after a prolonged exposure to x-ray an erythema of the skin was produced and in some instances a dermatitis or even deep ulcerations occurred. This phenomenon promptly led to the suggestion that the x-ray might possess some therapeutic value. As with all new types of therapy, too little was known and too much was expected, and the results obviously included many failures as well as some x-ray burns. X-ray therapy is now well established and its value and limitations are recognized and consequently the results are much more satisfactory.

The reaction of the tissues to x-ray is, of course, important. This reaction may be one of several types, according to the amount of x-ray and the character of the x-ray given. Large doses cause complete destruction of cells with a necrosis of the tissue. Such doses are termed lethal doses. Smaller doses given

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over a longer period of time will cause a fibrosis of tissues without necrosis and are termed sub-lethal doses. The blood vessels are particularly affected and endarteritis often appears along with fibrosis. Radiation given in small doses often has a stimulating effect on the tissue, the amount given is sufficient to cause a reaction but insufficient to cause fibrosis or necrosis. This is termed a mild reaction-ary dose.

In using large doses of heavily filtered x-ray, such as in deep therapy, a systemic reaction is often encountered. This reaction may occur while the treatment is being given, or, a few hours after the treatment, and it lasts from a few minutes to several hours and on very rare occasions for several days. This reaction is termed "Roentgen Sickness" and consists of varying degrees of anorexia, nausea and vomiting, headache and prostration. Several factors play a part in the causation of this sickness, but the sickness usually appears in proportion to the amount of x-ray which is absorbed by the tissues.

Heavy doses of x-ray also cause a certain reaction which appears about a week to ten days after the x-ray treatment has been given. This reaction is quite severe at times and the patient must have a certain amount of general resistance in order to withstand such a reaction. The resistance of older people, and especially those with carcinoma, is quite low and at times these individuals are unable to withstand such a reaction. The blood picture is the best criterion we have in judging the resistance of an individual. If the red blood cells are below three million, or, if the hemoglobin is below forty per cent, or, if the white blood cells are below five thousand, a large dose of x-ray should be administered with caution. Heavy doses of x-ray will cause marked changes in the blood and if the blood picture falls below the level mentioned above, the x-ray treatment should not be repeated. When the blood picture has returned to normal, x-ray therapy can then be resumed with safety. The condition of the blood should always be closely watched when large doses of x-ray are being given.

X-ray as a therapeutic measure is of value in several fields of medicine. First, dermatology; second, in the treatment of malignancies,

and third, in the treatment of certain miscellaneous diseases. Common conditions such as acne, eczema, trichophytosis, and related fungi diseases, boils, carbuncles, psycosis, pruritis, etc., are treated with good results. This field is a specialty within itself and I will not go into detail here.

In the second group, or, the malignancy group, much can be said. X-ray therapy in this field has received a great deal of unjust criticism and most of this criticism has come from those not familiar with this field and those who expected too much from this form of therapy. X-ray therapy is at a great disadvantage due to the fact that it is usually instituted when the malignancy is in its terminal stage. Early treatment is the secret of the success of any type of therapy which deals with malignancy, and this is just as true with x-ray as it is with surgery. If this type of therapy is instituted in the terminal stage, we cannot expect cures, but we can expect some retardation in the process of the disease and some relief of the pain. This is a little more than any other type of therapy offers to advanced malignancies.

There is another factor which plays a very important part in the success of this type of treatment and that is the relative radio-sensitivity of the malignancy which is being treated. It has been demonstrated that some types of tumors are sensitive to radiation and these tumors are consequently said to be radio-sensitive. These tumors respond quickly to radiation. Other tumors are not sensitive to radiation and are said to be radio-resistant. The response of these tumors to radiation is slow; prolonged and incomplete.

The next question which presents itself is, how is radio-sensitivity of the tumor to be determined? Unfortunately there is only one sure method and that is by microscopic examination. Tumors composed of cells which are immature and which cannot be differentiated well are highly malignant and are also radio-sensitive. The cells of these tumors grow quickly, divide rapidly and metastasize rapidly. These immature cells and more especially those, which are undergoing mitotic division, are susceptible to and easily destroyed by radiation. Radiation is the treatment par excellence for this type of tumor.

At the other end of the scale we find tumors composed of more mature cells which can be differentiated with a fair degree of accuracy. These cells grow, divide, metastasize and respond slowly to radiation. More radiation is required to destroy them and some of them fail to be affected by the average amount of radiation. These tumors are said to be radio-resistant. Surgery is the best type of therapy for these tumors where all of the tumor cells can be removed. Malignant tumors have been divided in four classes according to their susceptibility to radiation, those at one end being radio-sensitive and those at the other, radio-resistant.

With these facts in view it is easy to see the reason for the failure of x-ray therapy in some cases. On the other hand we must recognize that radiation would be the best form of therapy for radio-sensitive tumors. It is more effective than surgery in these cases and surgery on the other hand is more effective in radio-resistant tumors. It is not possible to classify tumors thusly without a biopsy and in many cases a biopsy is out of the question. If such is the case it is better to give x-ray with the attitude that it may be of value if the tumor happens to be a radio-sensitive one. Under such conditions we should not condemn the x-ray if it fails to obtain a good result. At the Memorial Hospital in New York radio-sensitive tumors are treated with radiation and radio-resistant tumors are handled surgically. Since this procedure has been instituted the per cent of five years cures has increased, the surgical results and the results from radiation have improved. Realizing these limitations and indications for x-ray therapy it can be used much more effectively.

In considering malignancies I would like to emphasize again the well-known fact that the pain which occurs in the late stage of the process can be partially relieved by radiation. Even though radiation does not cure advanced malignancies it will impede the process and prolong life. Malignancies of the bladder, cervix, uterus, prostate, rectum, vagina, kidneys, spine, lungs, breast, mediastinum, brain, esophagus, bone and abdominal viscera, as well as the leukemias, Hodgskin's disease and lympho-sarcoma, are all treated with deep x-radiation with benefit.

In the last class I would like to consider a few miscellaneous conditions which can be benefited by x-radiation. Hyperthyroidism is primarily a surgical condition but under certain conditions surgery cannot be used. In the mild stage and especially where operation is refused x-ray will abate the toxicosis quite satisfactorily. There are some thyroids which can be benefited more safely and effectively by radiation than by surgery.

The treatment of the fibroid uterus by radiation is well established. In fact this type of therapy is so extensively used that the large fibroids which were so numerous at one time are at present quite uncommon.

In chronic neuritis and especially in sciatica, x-ray is indicated. These conditions are stubborn and difficult to treat and when other measures have failed, x-ray applied to the part effected will sometimes give good results. Another condition which occasionally responds well to x-radiation is chronic arthritis.

Chronic bronchitis in children following whooping cough and influenza usually responds to x-radiation and the results are quite spectacular at times. Bronchitis in adults responds more slowly. X-radiation given to the chest anteriorly and posteriorly in small doses will control the distressing prolonged paroxysmal stages of whooping cough. The relief which is obtained from these treatments is quite gratifying at times. It should not be used in all cases but should be saved for the severe prolonged case of whooping cough where the paroxysms become debilitating.

When asthmatics have been studied thoroughly, especially from an allergic viewpoint and, when the more common types of therapy have failed to relieve this condition, x-radiation should be instituted. The results in children are better than those in adults. The change has been so marked in some cases that even the positive skin tests have become negative. The radiation is given to the lung by some and to the spleen by others. A reaction in the form of an asthmatic attack along with some nausea and vomiting follows a certain per cent of the treatments, but better results are obtained when a reaction follows the treatment. This type of treatment is not used sufficiently but it should always be

used when the more rational types of therapy for asthma have failed to give relief. It should never be the first type of therapy used.

In conclusion I would like to emphasize the following facts:

First, that the x-ray may have a destructive action on the tissues; an inhibitory action on the tissues; a stimulating action on the tissues, and, that it may cause a certain systematic reaction.

Second, that x-ray as a therapeutic measure may be used in dermatology, in malignancies and miscellaneous diseases such as thyrotoxicosis, fibroid uterus, neuritis, arthritis, whooping cough, bronchitis and asthma.

Third, that the results in the treatment of malignancies depends on the radio-sensitivity of the tumor being treated.

Fourth, that it may be used as a palliative, as well as a curative measure in treating malignancies.

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BLADDER DIVERTICULA: SURGICAL REMOVAL

According to J. E. Eisenstaedt and T. G. McDougall, Chicago (*Journal A. M. A.*, March 14, 1931), increased intracystic pressure due to obstruction or infection or both play an important role in causing herination of the bladder through a congenitally weak area. Congenital diverticula show no histologic characteristics to differentiate them from the acquired type. There is no diagnostic subjective symptom of bladder diverticula. Dysuria over a long period of years, and the necessity of emptying the bladder twice in a short time, may be considered suggestive symptoms. Cystoscopy and cystography are the two important methods of diagnosis. Complete surgical removal is indicated in all cases in which the general condition warrants operative intervention. Preliminary drainage accomplishes little in preparing a patient for radical resection. A technic of radical resection is described, with necessary modifications, that has proved satisfactory in their hands.

METHODS ADOPTED AS SUBSTITUTES FOR SANITATION IN THE CONTROL OF TYPHOID FEVER AND HOOKWORM IN GEORGIA*

H. B. JENKINS, M.D.

Thomasville

That there are no substitutes for sanitation in the prevention of typhoid fever, hookworm, and other intestinal diseases has been proved by the results obtained in many communities where sanitary methods of excreta disposal have been adopted. Replacing open-back surface privies with sanitary privies, septic tanks, or sewage connections should be our first thought in the control of typhoid fever. The proper disposal of excreta is the only method whereby a community may permanently rid itself of hookworm disease or hookworm infection.

The excellent results obtained through the use of typhoid vaccine, especially under conditions where its administration was a compulsory procedure, has led to its adoption as the exclusive method of typhoid control in the rural communities and small towns of Georgia. Notwithstanding the fact that it has been of value in the control of typhoid in our state, it is perhaps unfortunate that its use has been advocated to such an extent that the more important measures of sanitary improvements have been overlooked or neglected. We have been justified in advocating its use, but those who were treated may have been properly told that sanitary improvements were of primary importance in the control of typhoid fever and that vaccine was given simply as an added precaution.

In the annual report of the Athens and Clarke County Health Department for 1929 it is stated that "immunization has been secondary to sanitation as a control measure" and that "the application of sanitary measures has made unnecessary the extensive use of typhoid vaccine." During 1929 there were no deaths from typhoid fever and only 57 completed typhoid inoculations were given. The report shows that for the five year period 1920 to 1924 inclusive that there were 34 deaths from typhoid and that for the

*Read before the Thomas County Medical Society, Thomasville, Ga., October, 1930.

five year period 1925 to 1929 inclusive that there were only five deaths—a reduction of approximately 85 per cent. Since 1920 there have been given over 18,000 completed typhoid vaccine treatments in Thomas County. For the five year period 1920 to 1924 inclusive there were 36 deaths from typhoid in Thomas County and for the five year period 1925 to 1929 inclusive there were 16 deaths—a reduction of 56 per cent.

In the 1912 Annual Report of the Rockefeller Hookworm Commission the hookworm infection rate of Thomas County was listed as 59.1 per cent. Of 28 other counties reported on that year and in the 1913 report only four showed lower infection rates than Thomas County and 19 counties had infection rates above 75 per cent, the highest being 96.74 per cent. Mass treatments so quickly rid the population of parasites and proper sanitation to prevent soil pollution and reinfection were advised. The advice to be treated was followed in an excellent manner but the advice to prevent soil pollution was ignored or neglected. The hookworm infection rate in Thomas County, exclusive of Thomasville, for 1930 was found to be 48.7 per cent—a reduction in the infection rate of only 10.4 per cent in nearly twenty years. It is generally understood by physicians that treatments alone will practically eliminate hookworm disease from a community provided all the heavily infected persons will take the treatments. But if these treatments are at any time abandoned in a community where even light infections persist the intensity of infection may return to its original level over a period of a few years. Sanitary privies in the small towns and rural homes remain the only solution of the hookworm problem.

With the exception of a few counties in Georgia, typhoid vaccination seems to be emphasized more than the important measure of sanitation in the prevention of typhoid fever, and hookworm treatments are emphasized more than the important measure of sanitation in the prevention of hookworm disease. This is largely true of counties with or without health officers. It is more spectacular work than the slow and deliberate methods

necessary in sanitary campaigns and it is along the line of least resistance. The average health officer has found that giving vaccine and hookworm treatments help him to produce a monthly report which shows that he has done some work. It also affords him a chance to do some personal work for a large percentage of the people and to make acquaintances and friends in rapid order. Once he has convinced the people of the importance of vaccine in typhoid control and of hookworm treatments in hookworm control, these duties with a few others that he has to perform claim his time to such an extent that intensive sanitary campaigns are impossible of execution. All of which means that sanitary inspectors to do sanitary work are necessary if the work is to be done.

Alabama has solved the problem by passing a state law which requires a sanitary method of excreta disposal for every home, both rural and urban. Through a state law and with the aid of a state subsidy each county must support a health unit which has, in addition to a health officer, nurse, and clerk, a full-time sanitary inspector. In Florida, with county health units unknown, the Sanitary Department of the State Board of Health, with sufficient personnel and financial support, is enabled to enforce a state law requiring all incorporated towns and other public places to have a sanitary system of excreta disposal. North Carolina, through well organized county health units, has made rapid strides in this field. Georgia has shown little progress because of an overworked Sanitary Department of the State Board of Health in malaria control and other important problems, lack of financial support for the State Board of Health, lack of legislation to remedy unsanitary conditions in public places, lack of health units to sponsor this work in rural districts, and lack of sanitary personnel in those health units already established. The chief remedy for a state which brings up the rear in sanitation is the adoption of a system of the type in operation in Alabama—namely, health units for all counties, sanitary inspectors in the personnel of the health units, and state sanitary laws to aid the health officials in their work.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Association of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

MARCH, 1931

SCIENTIFIC TRENDS IN MEDICINE

Already the lay press is discussing extracts from medical literature, the advance in diagnostic procedure that makes possible earlier medical treatment that prevents diseases from gravitating to the necessity for surgery, for research studies are beginning to show that more and more of the so-called surgical diseases are primarily medical. This is notably true of peptic ulcers and the gallbladder complex. The rare art of intensive internal medicine is bringing to light many other possibilities of prevention such as goiter, infections of the urinary tract, etc. The progress of surgery has lingered too long in the stage of being satisfied in dealing with end results. Better obstetrics is pursuing the same history and with better hygienic conditions and social environment will lessen the questionable need of surgery in the female neuropelvic complex associated with varying degrees of subnutrition, for many uninformed patients become self-persuaded that all that is necessary for a cure is to make up their minds to have an operation. The prompt recognition of gonorrhoeal and other infections of the uterus would save many a subsequent laparotomy. The ease and rapidity of a Caesarean section with the insistence of the family becomes a temptation to a mature judgment for the spectacular phase of surgery in the minds of the laity has had a tendency to warp the judgment of the surgeon. Tonsillectomies will continue to lead in the number of operations because of a congenital condition and is becoming more and more a public health measure that will anticipate the development of hypertension, heart disease, rheumatic conditions, etc., in later life. Scientific medicine is beginning to realize the great possibilities of endo-crinology, such as preventing the development of surgical conditions in diabetes with insulin, ovarian hormones, and pitui-

trin in unexplained hemorrhages of the uterus, etc.

While progress in the prevention of medical diseases is greatly in advance of surgical disease it may be asked who is responsible for this condition? Internists and surgeons should consult oftener as to the potential needs of surgery before calamity arrives, for the surgery of twenty-five years ago was in many instances a process of salvage. The surgeon must make himself competent to share in the responsibility of a diagnosis made by the internist, for the ambition of surgery and internal medicine to know more of each other should never die. We are afflicted about as often with medical-mindedness as we are with surgical-mindedness. The master surgeon should have had at some time in his career considerable experience in medical practice and a surgical service should be a part of the equipment of the internist. It is one thing to diagnose a set of pathological factors, but

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.

it is another problem to correlate the significance of their interactive influences.

According to our reports 24.5 per cent of all postoperative deaths from disease proceeded from the appendix, which contributes indirectly to the rate for intestinal obstruction (16.1 per cent). Shall we not hope that this leading factor in mortality can at least be mitigated by greater knowledge of intra-intestinal conditions supplemented by some kind of vaccine treatment? The relative rates for gallbladder (7.2 per cent) and peptic ulcer (4.7 per cent) are already being lowered. Comparing the last two decades the number of gallbladder operations has relatively decreased 48 per cent, even in the presence of an inferior form of improved methods of medical treatment. A similar comparison shows that hysterectomies have decreased 26 per cent because of the use of radium. The marked decrease of postoperative mortality rates generally has been due more to an earlier

application of surgical treatment than to any improvement of surgical technique which has remained more or less standardized.

R. M. HARBIN, M.D.

PRIVATE GROUP CLINICS*

A study of private group clinics in the United States, made for the Committee on the Costs of Medical Care, by C. Rufus Rorem, has been issued as Publication No. 8 of the Committee.

There are approximately 150 such clinics, with a total medical personnel of about 2,000. They represent a comparatively recent development in medical practice, most of those now in existence having been organized since the World War. Almost none is to be found in the Eastern States; the majority are in the middle west.

The average capital investment in plant and equipment, excluding hospital facilities, was \$10,000 per practitioner in seven clinics, which supplied information on this point. The average capital investment in medical equipment and apparatus was \$3,600 for 217 practitioners in nineteen clinics supplying information.

There are two general classes of clinic practitioners: those who share in the ownership of the clinic assets and participate in its profits; those employed solely on a salaried basis. The former group is composed of relatively older men. Data from thirty-four clinics revealed an average of twenty years since graduation from medical school for the "owners" and eight years since graduation for the "salaried" physicians.

Of 415 clinic physicians listed in the 1929 American Medical Directory, 337 were members of the American Medical Association. Clinic physicians were found to belong to specialized associations to a greater extent than independent practitioners in the same communities, a result, in part, of the fact that a larger percentage of clinic members are specialists.

The distribution of the various specialists among fifty clinics was as follows, indicating those groups in which each specialty was represented by at least one practitioner: internal medicine, fifty; surgery, fifty; eye, ear, nose and throat, forty-six; obstetrics, thirty-seven; urology, thirty-five; pediatrics, thirty; x-ray, twenty-seven; pathology, twenty-six; dentistry, seventeen; gynecology, seventeen.

Perhaps the most striking development in group clinic practice is the "business office",

a separate department under a lay business manager, who is an employe and whose duties and responsibilities are determined by the clinic physicians. Financial dealings with patients usually rest in the hands of these business managers, physicians wishing, it appears, to have as little of these as possible, although their wishes with regard to the establishment of fees prevail.

According to statements by forty-two clinic managers, clinic fees appear to be regarded by the general public as neither higher nor lower than those of local doctors in private practice. Twenty-one managers say their fees are "about the same", eight say they are "higher" and thirteen that they are "lower" than those of independent practitioners.

The practice of the typical private group clinic is essentially local. The majority of patients, managers say, are persons of moderate means, with a considerable number who might be classed as well-to-do, and a few others who are very poor.

Approximately one-fourth of 60,000 patients served in fourteen clinics in 1929 were hospitalized during diagnosis or therapy. Approximately 10 per cent of 41,000 patients in ten clinics were treated by major surgery. In twenty-one clinics, 528,000 visits by patients were received by 215 members, on average of 2,459 per practitioner.

Data were received from twenty-seven clinics regarding gross and net income per practitioner. Gross incomes ranged from \$10,708 to \$25,606, and net incomes from \$5,960 to \$17,449. The average gross income for each of the 314 practitioners was \$14,908, and the average net income \$9,747.

The conclusions drawn by Mr. Rorem from his study embrace the following:

"1. Group clinics are in direct economic competition for the medical service which constitutes the major portion of the practice of independent practitioners.

"2. The economic success of group practice depends upon the degree of utilization of the capital investment and of the time of the individual practitioners. The medical service of a clinic cannot usually be adjusted to the convenience of a patient as easily as can the services of an independent practitioner. Where, however, a patient requires the services of several specialists he can probably obtain treatment with less inconvenience and expense at the office of a clinic than from separate practitioners.

"3. The members of private group clinics generally make an effort to maintain a personal relationship between physician and patient.

*Private Group Clinics: The Administrative and Economic Aspects of Group Medical Practice as Represented in the Policies and Procedures of Fifty-Five Private Associations of Medical Practitioners, by C. Rufus Rorem, Ph.D., C.P.A.; Committee on the Costs of Medical Care, Washington, D. C.

"4. The volume of medical service carried on by a private group clinic makes possible the establishment of a specified maximum fee for difficult individual cases and for complete annual service to groups of patients.

"5. Clinics have in general provided net incomes and working conditions for physicians which make possible the continued development of group practice. The removal of financial and administrative responsibilities from the individual clinic practitioner has made him more completely available for professional service, and has, in some clinics, increased his opportunities for scientific research and development.

"6. The employment of business managers has usually resulted in increased administrative economy and efficiency. The establishment both of fees and of collection policies is based upon financial data obtained through conventional business methods. Inasmuch as the financial status of a clinic patient is usually investigated, group clinics probably perform less 'free service' than would an equal number of independent practitioners doing the same volume of work.

"7. Private group clinics, through their available equipment and their coordination of medical specialists, are in a position to fulfill the basic requirements of good medical care with economies from which either or both the clinic members and the public may benefit."

COMMITTEE ON COST OF MEDICAL CARE.

INTRATHORACIC GOITER

GEORGE M. CURTIS, Chicago (*Journal A. M. A.*, March 7, 1931), believes that total and partial intrathoracic goiter is frequently unrecognized owing to the fact that a roentgenogram is not made of the trachea. It is nearly always nodular, frequently cystic, and its vessels usually reveal degenerative changes and associated hemorrhage. The prognosis is that of nodular goiter developing within the superior mediastinum. The treatment is surgical removal and it is of advantage to practice this before the goiter has become too large, adherent or even malignant. The cases should be individualized. The operative mortality is very low. The compressed and deviated trachea returns to its normal position following the thyroidectomy.

MNAAGEMENT OF FRACTURES INVOLVING PARANASAL SINUSES

John J. Shea, Memphis, Tenn. (*Journal A. M. A.*, Feb. 7, 1931), states that fractures involving the sphenoidal sinus are fortunately rare, but their care should be along the same lines of common sense as in ethmoidal fractures. The rhinologist is best prepared to treat fractures involving the paranasal sinuses. The reduction of the fractures and the protection of the sinuses are the underlying therapeutic principles.

WHERE WE MEET

The eighty-second annual meeting of the Medical Association of Georgia will be held at the Biltmore Hotel in Atlanta, Ga., May 13-14-15, as guests of the Fulton County Medical Society. Besides a most interesting, scientific program there will be a banquet, golf tournaments, trap-shooting, and other amusements.

Dr. T. C. Davison, President of the Fulton County Medical Society, has appointed the following committee on arrangement.

Dr. M. C. Pruitt, Chairman

Dr. W. E. Person

Dr. C. W. Roberts

Dr. J. N. Brawner

Dr. E. G. Ballenger

Dr. C. E. Waits

Dr. T. Toepel

Dr. E. D. Shanks

The visiting ladies will be guests of the Woman's Auxiliary to the Fulton County Medical Society. Mrs. Bonar White, President of the local Society, through its committee will entertain with banquets, teas, and various amusements.

All meetings will be held at the Biltmore Hotel.

Make a ring on your calender for this date.

M. C. PRUITT, M.D., *Chairman.*

NEW CHAPTER WRITTEN IN THE HISTORY OF SURGICAL PROGRESS IN THE SOUTH

The second (first scientific) annual assembly of the Southeastern Surgical Congress held in Atlanta March 9-10, marks a new chapter in the history of surgical progress in our Southland.

Commentaries are unanimous in their opinions that at no other gathering of surgeons anywhere in this country has there ever been a group of more distinguished surgical talent than this program represented. Every speaker was present and every speaker was an artist and every address was presented in a masterly manner. The different surgical specialties were represented by the world's greatest artists.

The visiting surgeons from this country and abroad represented the upper strata of the surgical profession. There were approximately 750 in attendance, all eager to hear the messages and see the latest demonstrations in surgical technique and methods of procedure.

Among some of the highlights may be mentioned the papers and demonstrations presented by Dr. George W. Crile, of Cleveland, Ohio; Dr. Francis G. DuBose, of Alabama; Dr. Charles E. Dowman, of Atlanta; Dr. Robert C. Coffey, of Portland, Ore.; Dr. Lewellys F. Barker, of Baltimore; Dr. Frank H. Lahey, of Boston; Dr. Chevalier Jackson, of Philadelphia; Dr. Hugh H. Young, of Baltimore; Drs. Hoke and Thorton, of Atlanta; Dr. Willis C. Campbell, of Memphis, and Dr. William Wayne Bobcock, of Philadelphia.

Our Southern men compared very favorably with their Northern, Eastern, and Western contemporaries in the presentation of their subjects.

The surgeons of the Southeast are greatly indebted to the guests who left their work and traveled many miles, in some cases under extreme hazards, to make this meeting a success.

The meeting was a success in every sense of the word. The most enthusiastic expectations were exceeded. Pep and enthusiasm greeted you at the front door in the beginning and never ceased until the last word was uttered.

The Southeastern Surgical Congress, we feel, is a permanent institution and is destined to serve the medical fraternity of the South in a cooperative program for greater progress.

B. T. BEASLEY, M.D., *Secretary*.

COUNTY SOCIETIES

1931 HONOR ROLL*

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 4, 1930.
2. Butts County, Dr. Robert L. Hammond, Jackson, December 2, 1930.
3. Monroe County, Dr. G. H. Alexander, Forsyth, February 18, 1931.

*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

NEW MEMBERS FOR 1931

Avera, J. B., Brunswick.
 Baxley, W. W., Macon.
 Culpepper, W. F., Senoia.
 Ehrlich, M. A., Bainbridge.
 Ehrlich, Sigo, Bainbridge.
 Hewell, Guy C., Dewey Rose.
 McMillan, Thomas J., Milan.
 Pirkle, W. H., Cochran.

COUNTIES REPORTING FOR 1931

Bulloch-Candler-Evans Counties

The Bulloch-Candler-Evans Counties Medical Society announces the following officers for 1931:

President—W. D. Kennedy, Metter.

Vice-President—W. D. Woods, Portal.
 Secretary-Treasurer—W. E. Simmons, Metter.
 Censors—R. L. Cone, E. C. Watkins, and H. H. Olliff.

Elbert County Medical Society

The Elbert County Medical Society announces the following officers for 1931:

President—A. S. J. Stovall, Elberton.
 Vice-President—W. A. Johnson, Bowman.
 Secretary-Treasurer—Guy C. Hewell, Dewey Rose.

Monroe County Medical Society—100%

The Monroe County Medical Society announces the following officers for 1931:

President—W. J. Smith, Juliette.
 Vice-President—J. O. Elrod, Forsyth.
 Secretary-Treasurer—G. H. Alexander, Forsyth.

Cobb County Medical Society

The Cobb County Medical Society announces the following officers for 1931:

President—R. W. Fowler, Marietta.
 Vice-President—C. W. Burtz, Acworth.
 Secretary-Treasurer—G. F. Hagood, Marietta.
 Delegate—W. Mayes Gober, Marietta.
 Alternate Delegate—L. L. Welch, Marietta.
 Censors—J. E. Lester, L. G. Garrett, and J. W. Ellis.

Fulton County Medical Society

The Fulton County Medical Society announces the following officers for 1931:

President—T. C. Davison, Atlanta.
 President-Elect—Dan Y. Sage, Atlanta.
 Vice-President—William A. Smith, Atlanta.
 Secretary-Treasurer—Howard Hailey, Atlanta.
 Delegate—Dan Y. Sage, Atlanta.
 Alternate Delegate—George W. Fuller, Atlanta.
 Delegate—T. C. Davison, Atlanta.
 Alternate Delegate—A. M. Dimmock, Atlanta.
 Delegate—Howard Hailey, Atlanta.
 Alternate Delegate—Joseph Yampolsky, Atlanta.
 Delegate—Marion T. Benson, Atlanta.
 Alternate Delegate—John B. Fitts, Atlanta.
 Delegate—W. Frank Wells, Atlanta.
 Alternate Delegate—E. G. Ballenger, Atlanta.
 Delegate—C. C. Aven, Atlanta.
 Alternate Delegate—Lawson Thornton, Atlanta.
 Delegate—Marion C. Pruitt, Atlanta.
 Alternate Delegate—C. W. Roberts, Atlanta.

Ben Hill County Medical Society

The Ben Hill County Medical Society announces the following officers for 1931:

President—Aubrey Harper, Wray.
 Vice-President—Ralph E. Russell, Fitzgerald.
 Secretary-Treasurer—L. S. Osborne, Fitzgerald.
 Delegate—G. W. Willis, Ocilla.

Madison County Medical Society

The Madison County Medical Society announces the following officers for 1931:

President—George W. Kelley, Carlton.
 Vice-President—R. J. Westbrook, Ila.
 Secretary-Treasurer—W. D. Gholston, Danielsville.

Delegate—H. G. Banister, Ila.
 Alternate Delegate—C. H. Bryant, Comer.
 Censors: C. H. Bryant and W. D. Gholston.

Telfair County Medical Society

The Telfair County Medical Society announces the following officers for 1931:

President—D. W. F. Maloy, Milan.
 Vice-President—W. H. Born, McRae.
 Delegate—Thomas J. McMillan, Milan.
 Censors—W. H. Born, A. J. Jones, and B. M. Kennon.

Ocmulgee Medical Society

The Ocmulgee Medical Society announces the following officers for 1931:

President—J. M. Smith, Cochran
 Vice-President—W. H. Pirkle, Cochran.
 Delegate—W. H. Pirkle, Cochran.
 Alternate Delegate—J. M. Smith, Cochran.
 Censors: A. R. Bush, W. V. Parramore, and Ernest L. Smith.

Carroll County Medical Society

The Carroll County Medical Society announces the following officers for 1931:

President—L. E. Wilson, Bowdon.
 Vice-President—D. S. Reese, Carrollton.
 Secretary-Treasurer—H. J. Goodwyn, Carrollton.
 Censors: H. L. Barker, O. D. King, and S. F. Scales.

Taliaferro County Medical Society

The Taliaferro County Medical Society announces the following officers for 1931:

President—T. C. Nash, Philomath.
 Secretary-Treasurer—John A. Rhodes, Crawfordville.

Grady County Medical Society

The Grady County Medical Society announces the following officers for 1931:

President—Eugene Clower, Cairo.
 Vice-President—W. R. Moore, Cairo.
 Secretary-Treasurer—J. V. Rogers, Cairo.
 Delegate—J. V. Rogers, Cairo.

Glynn County Medical Society

The Glynn County Medical Society announces the following officers for 1931:

President—H. L. Akridge, Brunswick.
 Vice-President—H. M. Branham, Brunswick.
 Secretary-Treasurer—F. N. Aldrich, Brunswick.
 Delegate—Robert S. Burford, Brunswick.
 Alternate Delegate—G. W. Cheney, Brunswick.
 Censors: J. P. Harrell, G. W. Cheney, and C. C. Fishburn.

Reapportionment of Delegates to the American Medical Association on a basis of membership reported to April 1, 1931, will be made at the next session to be held at Philadelphia, June 8-12. Copy of letter from Dr. Olin West, Secretary, is printed on page 121.

ATLANTA

Eighty-Second Session of Association

POINTS OF INTEREST

Visitors to Atlanta will find many points of interest in and near the city which are of both scenic and historic importance.

Georgia's State Capitol Building, considered one of the most beautiful State capitols in the United States, is in Atlanta. In addition to housing the Statehouse offices and legislative halls, there is on the third floor of the capitol building a most interesting museum of Georgia's resources. One can spend hours here in profitable entertainment.

A monument to Benjamin H. Hill, gallant Confederate statesman, and a memorial fountain erected



Peachtree Gun Club

by the W. C. T. U. to the memory of Mrs. Mary Latimer McLendon, pioneer temperance worker and sister of Mrs. W. H. Felton, first woman United States Senator, are in the rotunda of the capitol. On the walls of the rotunda hang portraits of many distinguished Georgians.

One of the most beautiful structures in Atlanta is the home of the Sixth Federal Reserve Bank, which stands on Marietta Street almost opposite the City Hall. This institution is always a place of interest to visitors.

"The Wren's Nest," home of Joel Chandler Harris, writer of negro folklore and creator of "Uncle Remus", is preserved as in the days when Mr. Harris lived, loved, and labored there. It is a shrine visited every year by thousands who have enjoyed the engaging stories of our colored folk told so entertainingly by the author. "The Wren's Nest" is open to the public.

CLIMATE

Atlanta is located in the Piedmont region of Georgia, on the watershed which divides the Atlantic and Gulf of Mexico



Oglethorpe University



Emory University School of Medicine, Emory University, Georgia

streams east of the city flow into the Atlantic and those west flow into the Gulf. It is said that the waters of an old spring, from which Spring Street takes its name, flowed both east and west, so completely did their source rest on the crest of the watershed.

The drainage afforded by this natural location makes Atlanta one of the most healthful cities in America. The hills surrounding the city on all sides temper the heat of summer and cold of winter so that seldom any extremes are experienced here. The mean annual temperature is 61 degrees. June temperature for the past forty-eight years has averaged 76 degrees and for July 78 degrees. The high altitude, 1,050 feet above sea level, makes Atlanta the second highest city of her size and larger east of the Rockies.

EMORY UNIVERSITY

One of the South's largest universities, co-educational. Wesley Memorial Hospital, largest in Atlanta, located there, museum in Library Building on the campus open each morning (except Sundays) from 10:00 to 12:00, and each afternoon (except Saturdays and Sundays) from 3:00 to 5:00, contains exceptionally fine Egyptian-Babylonian collection acquired through the university's connection with Ameri-

can Scientific Expedition in 1920. Contains mummies dating back as far as 5000 B. C. and hundreds of other rare and interesting objects. Also large collection of Indian and stone-age remains and the largest exhibit of Georgia birds in the world. In Emory Theological Library is the Thursfield-Smith collection of "Westleyana", containing numerous books, manuscripts, letters, and many objects connected with the Wesley family and early history of Methodism. John Wesley's own pulpit is on display in Theological Chapel.

EDUCATION

The first School of Ceramics south of the Ohio River is at Georgia Tech. Five of the South's leading colleges and universities are located here. They are:

George School of Technology, Emory University, Agnes Scott College, Oglethorpe University, Columbia Theological Seminary.

SECTION OF BATTLE OF ATLANTA PAINTING

There is but one cyclorama painting of a Civil War battle—and that is in Atlanta. It is the sole survivor of three which were painted in the 80's by artists for the staff of William Wehner's studio in Milwaukee. The cyclorama painting of the Battle of

Missionary Ridge was destroyed by cyclone years ago. That of Gettysburg was lost in a fire. This, of the Battle of Atlanta, alone is left. It is the property of the city. Once it was bought for \$1,000, and twice it was about to be abandoned as worth no further care. Now no fortune could buy it. G. B. Gress, a citizen, gave it to Atlanta in 1898,



Scene from the Cyclorama—Battle of Atlanta

WOMAN'S AUXILIARY

MEDICAL ASSOCIATION OF GEORGIA

OFFICERS

President	Mrs. Chas. C. Harrold, Macon	Recording Sec.....	Mrs. J. Cox Wall, Eastman
President-Elect	Mrs. Ralston Lattimore, Savannah	Cor. Sec.....	Mrs. Wm. R. Dancy, Savannah
1st Vice-Pres.....	Mrs. S. T. R. Revell, Louisville	Treasurer.....	Mrs. Ben Bashinski, Macon
2nd Vice-Pres....	Mrs. W. W. Battey, Sr., Augusta	Parliamentarian	Mrs. A. H. Bunce, Atlanta
3rd Vice-Pres.....	Mrs. J. E. Penland, Waycross	Editor.....	Mrs. C. W. Roberts, Atlanta

PURPOSE OF ORGANIZATION*

The Woman's Auxiliary to the Fulton County Medical Society was organized to assist in the entertainment of visiting conventions, (there will be two—one in March, one in May, when we hope to give pleasant evidence of Southern hospitality) to promote acquaintance and good-fellowship among physicians' families, and to extend the aims of the medical profession through the wives of doctors to the various women's organizations which look to advancement in health and education. An essential feature of our not to have any direct part in their science, work is a sympathetic service to the doctors; but to be an effective Auxiliary to that service.

We contribute to the State Auxiliary Educational Fund for worthy medical students and have loans at present to five to whom we lent aid before we merged our Auxiliary Fund with the Georgia State Educational Fund.

Besides committees for the conduct of business, we have, as might be expected of a medical Auxiliary, committees through which we express by personal service the love in our hearts for those less fortunate than ourselves; such as Relief and Welfare for emergency aid to those in distress; Red Cross, which will have sewing classes, and the Hospital Committee which serves at six hospitals, giving such service as advised by the authorities at these hospitals, besides visiting, entertainment, sewing gifts of flowers, food and clothing.

A Health film library is maintained at Macon and through our Health-film Chairman we are ready to give information concerning these films as to number, titles, how obtainable. Any information we have we will gladly give when women's organizations wish to show a health film on a health program.

Health Education is our great work. During February, March, and April we will stress the adoption of the Ellis Health Law and

give information to the public to create inspiration to cause its adoption by various counties. Only 30 of the 161 counties operate under it. Two clauses have been appended to the revision of the State Health laws and the creation of State Board of Health. The other two, provisions for a county Board of Health and a Commissioner of Health (full-time physician) work in these 30 counties. Three members of this Board are the County Superintendent of Schools, the Chairman of Roads and Revenues, a reputable physician elected by the grand jury to serve four years, or until a successor is elected and qualified. Becomes a law or may be obtained by a tax levy or any unused general county fund. The doctor appointed inspects schools, sanitation, hotels, theaters, food places, inns, care for quarantine and removes tubercular children from schools to the proper places. Georgia has around 60,000 tubercular children so you may see the urgent necessity for this law as it is the only lawful way of removing such children both for their care and the protection of others. Atlanta has its physician, Fulton County has the Board of Health, but no Commissioner of Health.

Our Co-Chairman of Health Education is the Chairman of Health Education in the Atlanta P. T. A. In the last survey found 33,246 white children examined in Atlanta, 12,742 were defective. So health projects for the coming year include correction of defects, wholesome school lunches, checking milk supplies, and especial emphasis on immunization against diphtheria, typhoid, smallpox, and an earnest cooperation with all organizations in this activity. Also careful consideration of health and morals of servants before engaging them for care of children; cooperation between home and school for education in good health habits. We desire to crystallize public sentiment for an enlarged hospital, especially for children and maternity cases, and to study health legislation and to work for the periodical examination for every adult.

We urge women's organizations to have health programs asking for a talk by a member of the Fulton County Medical Society, the using of health films, and that doctors'

*Read before the Federation of Women's Clubs, Atlanta, Ga., January, 1931.

wives as they are informed about scientific methods of disease prevention and have understanding of public health principles accept chairmanships of public health education whenever possible so as to carry forward authoritative programs and be of assistance to those influential groups of women as they advocate rational measures for promotion of health. The Auxiliary Committee will furnish speakers to give public dissemination of information on health and help in programs as this work should be sanely directed.

A pre-school round-up to check and correct defects is spring work, with the hope of corrections being made by autumn, as the American child is only 25 per cent physically equipped. In a recent pre-school check, here among the colored, only three were found vaccinated against smallpox.

The Auxiliary has at times program studies of many interesting phases of medical history in order to have dependable knowledge of actual achievements of the profession.

This year we are making plans, also, for an active citizenship committee.

MRS. J. BONAR WHITE, *President*
Fulton County Auxiliary.

HEALTH FILMS

To the Officers of County Auxiliaries:

At the fifth annual session of the Woman's Auxiliary, Medical Association of Georgia, the following resolution was adopted:

Resolved, That the Woman's Auxiliary to the Medical Association of Georgia establish a Health Film Library. Money for this purpose may be contributed by county auxiliaries or by interested individuals. The fund shall be kept separate from all other State moneys and used for the rental, carrying charges, or other expenses necessary. Be it further resolved, That each county auxiliary assume the responsibility of planning during the year a Health Program in each county, using one or more Health films. This program should be as far reaching as possible. There should be co-operation with the local Parent-Teacher Association, schools, other Women's Clubs. If there is a local theater, effort should be made to have the films shown there, both at a special meeting and on the public program. Resolved, That this should be in charge of a standing committee known as the State Health Film Committee. This committee shall make and keep a list of approved Health Films, both free and rentable. As far as possible the members of the committee shall review the pictures, so that they can give a personal recommendation.

And I wish to ask if your auxiliary would care to make a contribution to this fund. This is not obligatory, but each county auxiliary is urged to assume the responsibility of sponsoring one or more Health Programs during the year.

The Metropolitan Life Insurance Company furnishes

interesting films free—and rentable films range in price from \$3.00 to \$6.50, carrying charges extra.

Such subjects as:

"Bending the Twig"—one reel, ten minutes. The first habit of health in cleanliness.

"In Florence Nightingale's Foot Steps" shows training in classroom, laboratory, operating room, and medical and children's wards.

"Knowing Gnome"—one reel. Story of the wisest and busiest of a family of little men who live high in the mountains and who teach Betty and Bobby how to take care of their health.

"The High Road to Health"—three reels. A human narrative made to illustrate the most modern ideal of individual and social health; not bodily vigor and poise, but a wholesome and vital expression in work, recreation, and companionship.

"Conquering Diphtheria"—one reel. Film presents in simple form the scientific facts concerning diphtheria and the method by which science has first developed a cure and later a means of prevention.

"The Kid Comes Through"—one reel. Drama of child life in a big city; dramatizes the value of physical fitness derived from fresh air, wholesome food, and regular health habits in preventing tuberculosis.

"Peter Meets a Menace"—two reels. Public provisions for reaching, diagnosing, and treating tuberculosis.

"Mouth Hygiene"—one reel. Need of constant and careful attention to mouth is emphasized.

The Metropolitan Life Insurance Company furnishes free the following three films:

"Working for Dear Life"—one reel.

Producer: Visugraphic Pictures Corporation for the Metropolitan Life Insurance Company—1924.

Synopsis: A contrast between man's constant vigilance and inspection of locomotives, automobiles, etc., with his neglect of the inspection of his own body. Shows what the annual health examination is and forcibly points out its necessity.

"One Scar or Many"—one reel.

Producer: Worcester Film Corporation for the Metropolitan Life Insurance Company—1921. (To be revised 1928-29.)

Synopsis: Shows the importance of vaccination, methods of obtaining vaccine, and simplicity of vaccination.

"New Ways for Old"—one reel.

Producer: Carlyle Ellis for the Metropolitan Life Insurance Company—1926.

Synopsis: Three periods of diphtheria treatment: 1863, no cure; 1900, cure but no prevention; 1925, complete prevention.

With assurance of appreciation for your cooperation, I am

LUCILE FLANDERS SELDEN, *Chairman,*

State Health Film Committee.

Mrs. John A. Selden,

1102 Ridge Ave., Macon, Ga.

Committee: Mrs. E. R. Harris, Winder, Ga.; Mrs. R. C. Pendergrass, Americus, Ga.; Mrs. S. T. R. Revell, Louisville, Ga.

GEORGIA STATE NURSES ASSOCIATION

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Headquarters

131 Forrest Avenue, N. E., Atlanta.

A NATIONAL MESSAGE TO GEORGIA

"The Convention of the National League of Nursing Education will be held in Atlanta just preceding the meeting of the Medical Association of Georgia in May. From its opening to its closing session the convention will be one of note. At the opening meeting, to which physicians and the public are especially invited, Dr. C. W. Roberts will speak on 'New Tendencies versus Old Practices in the Healing Arts,' and on the closing day Dr. W. H. Burton, of Chicago, will address the convention on 'Supervision.' Dr. Burton is an educator of note and all professors of professional schools and colleges should find his address profitable. The Saunders medal for distinguished service in nursing will be awarded during the week and throughout the convention there will be delightful sounding events."—A. N. A. Bulletin, April, 1931.

In the Near East

Seventy-seven years ago Florence Nightingale turned her steps eastward to answer the call of the Crimea for some one to nurse the wounded. Out of that experience in the Near East emerged modern nursing. Today in Turkey there is a great need for nurses with modern training, and there is one school primarily where this can be obtained, the American Hospital and School of Nursing at Istanbul. The A. N. A. Board of Directors listened sympathetically in January to the story of the present need of that institution for larger and better-equipped buildings. A drive for funds is in progress in which there is included an effort to establish an endowment for the school, under the title, Florence Nightingale Memorial School of Nursing. The American Hospital at Istanbul was founded 10 years ago and since the establishment of the school of nursing, has graduated 19 Armenians, 11 Bulgarians, nine Greeks, 20 Russians, and 19 Turks. If you would like to know more about this effort to endow this American school in the Near East,

write to the American Hospital of Istanbul, Suite 1801, 475 Fifth Avenue, New York.

The Study of Distribution

The careful thought and study that is being given the distribution of nursing service through registry, hospital, and community council, continue with accelerated speed as objectives in this field begin to be clarified. A most valuable piece of work is that being done by the Joint Committee on the Distribution of Nursing Service, a full description of the findings of which is published in the April issue of the American Journal of Nursing. There are three sub-committees which brought most constructive reports to the recent meeting of the Joint Committee which made possible the wording of definitions in a most helpful fashion. It is expected in the near future that the committee will have available (1) suggestions relative to organization of local councils on nursing; (2) standards for hourly appointment nursing service; and (3) standards for institutional nursing, the initial title of which was "Tentative Standards for Graduate Nurses Engaged in First Level Nursing in the Hospital."

One of the facts brought out by the Joint Committee was the need for a close working relationship between that body and the A. N. A. Registry Committee. Hence the work done in the field on the continued Registry Study is of particular significance. During the past month, Ella Best, A. N. A. Field Secretary, has been in Florida and other Southern states, conferring with registrars and others faced with the registry problem, while Miss Geister, Headquarters' Director, during the same period made a study of the registry problem at Houston, Texas, and conferred with officers of the Mid-West Division regarding its plans for a joint vocational service. While in Chicago, she had the opportunity of seeing the "fine progress" which, she states, is being made in the Hourly

Appointment Nursing experiment being conducted there with the support of the Rosenwald Fund.

Coming Events

Springtime brings a full calendar of observances of interest to nurses. Easter Sunday a service will be held in Philadelphia in memory of our former president, S. Lillian Clayton, whose death occurred May 2 of last year. Many who knew her will pay tribute to her memory at this time, a wreath from the A. N. A. Private Duty Section being placed on her grave.

Several special days are marked on May's calendar. Mother's Day is to be more this year than individual greeting or cherished thought of one's own mother. The Maternity Center Association is asking that on Mother's Day we remember all the mothers of the country in a very practical way. To this end it is conducting an educational campaign to focus attention on the deplorably high maternal death-rate in the United States.

Two days after Mother's Day comes May 12, the one-hundred-eleventh anniversary of the birth of Florence Nightingale. Nurses throughout the country will observe this anniversary, it is expected, with a bit of thought turned to the life of this brave and intelligent and remarkably far-sighted lady who single-handed laid strong and sure the foundations for the development of modern nursing. May 12 also is national Hospital Day, in which, without doubt, many nurses will participate, careful plans for which are being made by the American Hospital Association.

Spring Greetings

Springtime, welcome this year as always, comes to us again with its message of new hope, new vigor, renewed life. Everyone, I suppose, is glad this difficult winter is over, with its many material problems and with that underlying spiritual depression which inevitably follows in the wake of low ebbs in our economic life. Nurses have been amazingly brave and generous in this period of hard times. There has been remarkably little complaint, in spite of instances of real suffering. There are many stories of nurses sharing cases so that each may have a little work; of hospitals, registries, and communities that have done their best to alleviate a situation they have been powerless at the time to remedy. According to the replies on the unemployment questionnaires sent from headquarters, help given the nurse in need of work has taken three forms, (1) giving work first to the nurse unemployed for the greatest period or with the greatest financial responsibility; (2) increasing the number of graduate nurses on the staffs of hospitals; and (3) decreasing the enrollment or entirely elimi-

nating the spring classes in the schools.

The nurse who has suffered the most in the unemployment of the past winter is, without doubt, the unattached nurse, the nurse who does not belong to her alumnae or district association, who has isolated herself from her associates in the profession, going to and fro her independent way, often moving from one place to another as the whim dictates. This fact was brought out clearly in the findings of the unemployment study, in letters and comments from the states, and in observations made in the field. And it is a major reason why, in a difficult period, we are prosecuting our Membership Campaign.

We believe that nurses can help each other, and, therefore, themselves, best through their organization. We believe that every employed nurse at this time can help the unemployed members of her profession by doing all that she can to further the program of her national association. And we believe most earnestly that it is through organization primarily that solutions will be found to those maladjustments in nursing service which are the underlying causes of unemployment in private duty nursing. It is our real hope, therefore, that you will throw yourself into this campaign for "100,000 Members by September 2," with all the enthusiasm, the vigor, and the renewed conviction that surge through us mortals with the return of spring.

JANET M. GEISTER,
Director at Headquarters.

An Announcement of Note

The National Committee on Award to act as judges in the student and district contests being held in connection with the Membership Campaign has been selected, the following having consented to serve: Major Julia C. Stimson, Superintendent, Army Nurse Corps; Dr. Malcolm T. MacEachern, Director of Hospital Activities, American College of Surgeons; Mary Ross, Associate Editor, *The Survey*; Elsie McCormick, columnist of the *New York World-Telegram*; and Bruce Barton, the well-known writer. The contests close on May 1st, essays, plays, and pageants being submitted by the contestants to each state contest committee which, in turn, will forward the prize-winning entries of that state to national headquarters before May 30th. This distinguished Committee on Award, which in the most friendly and kindest of manners is giving its time to this project, then will select the outstanding essay and play or pageant written by a senior student in a school of nursing and the winning historical essay and play or pageant prepared by a district association.

BOOK REVIEWS AND ABSTRACTS.

BOOK REVIEWS

Chronic Arthritis and Rheumatoid Affections; with recovery record. Bernard Langdon Wyatt, M.D., F.A.C.P. William Woodard Company, New York, 1930. 165 pages. Price \$2.50.

This volume is introduced by a statistical study of the incidence of rheumatic diseases by Dr. Louis I. Dublin in collaboration with Herbert H. Marks. Doctor Wyatt then proceeds to discuss the types and causes of arthritis with ideas of his own as well as quoting recognized authorities on this subject. He devotes a chapter to preventive measures, and to the importance and feasibility of early diagnosis. Following this are chapters on diet, non-specific proteins, hydrotherapy, joint exercises and movements, massage and orthopedic procedures.

The book is readable, giving an impression of a chat with a man of considerable experience and good judgment in the treatment of arthritis, rather than a heavy scientific treatise on the subject.

J. C. MASSEE, M.D.

A Textbook of Pathology, by E. T. Bell, M.D., Professor of Pathology, University of Minnesota. Lea & Febiger. The above book on pathology consists of a very concise treatise on the fundamentals of pathology. Systematically it is divided into twenty-eight chapters, including a total of 612 pages, exclusive of the index. There are 316 engravings and two colored plates. Besides the author there are five contributors, all of whom are from the University of Minnesota.

Doctor Bell, in writing this volume, presents the essential facts of pathology for medical students. The book is splendidly arranged and delightfully written.

For many years teachers in pathology have felt the necessity of a concise treatise in this field. The question may be asked, "Is this book not too restricted?" Possibly this criticism may be admitted; but if true, collateral reading on the part of the student and well-prepared lectures by the teacher will more than suffice. This combination in teaching should be most acceptable, for medical schools are primarily intended for preparing men to practice medicine; thus practical methods and essential facts not too theoretical are in order for their groundwork.

There are several interesting statements upon which the critic might express an opinion. On page 271 Doctor Bell writes plainly about the biopsy. He states that, "if there was more extensive use of the biopsy, there would be fewer radical operations for cystic disease and fibro-adenoma, etc.". This is an excellent conclusion, and his opinion in general is good to remember. Tumors of the breast should be in the hands of skillful surgeons thoroughly educated in this field. The duration of the mass, its size, and many other facts should be most carefully considered prior to biopsy. It is never wise to perform a biopsy on an inflammatory type of carcinoma.

On page 412 the author cleverly suggests the doubt-

fulness of the so-called "Status-Thymaticus phenomenon", as related to sudden death in children. Here is certainly field for thought and reflection. All pathologists are more or less victims of the necessity of clinging at times to the diagnosis of Status-thymaticolymphaticus. For the present we must accept the condition as extant.

On page 63 the author classifies edema clinically. He fails to mention positional edema and edema due to obstruction. By the latter type I refer to unilateral edema, edema of one or more of the extremities caused by tumors, aneurysms, etc.

A general review of Doctor Bell's book certainly convinces one that he has attained success in abbreviating a most excellent treatise on pathology for the student. I feel that it will be accepted as a great teaching asset, and I unhesitatingly recommend its use.

J. C. NORRIS, M.D.

A TEXTBOOK OF SURGERY

By JOHN HOMANS, M.D.

Assistant Professor of Surgery, Harvard Medical School

(1 vol., 1195 pp. Charles C. Thomas, Publisher; \$9.00.)

The preface states that "the aim of this book . . . is to record and amplify lectures now given by members of the surgical department of the Harvard Medical School. These . . . have been edited, reinforced with historical material and illustrations, and put forth as a book, which . . . is intended to teach the fundamentals and something of the practice of surgery". This Doctor Homans has admirably done, for as a textbook for undergraduate students and as a reference work for general practitioners and internists it is the best book on surgery yet published.

To say that anything is "best" lays one open to the criticism of being an extravagant enthusiast, but where, in one volume, can be found a systematic survey of the fundamentals of general and regional surgery, together with a review of orthopedic surgery and fractures, by Robert Osgood and Philip Wilson; of gynecology, by William Graves, and of neurological surgery, by such a master as Harvey Cushing? In addition, there have been introduced, from the standpoint of what every doctor should know, chapters on the Eye, and the Ear, Nose, and Pharynx.

Each chapter is headed by a summary, followed by a historical sketch and a review of the anatomy and physiology of the subject at hand. The historical sketch is informal and often anecdotal, and is, as the author states, "a tale of the classic work of great men, living and dead, and for one chapter or section it introduces the subjects later to be emphasized". Of more importance, it adds a bit of human interest and gives the student something he will not soon forget.

A special bibliographic index, together with an

index of subjects, prevents the cluttering of the text with references, but at the same time makes it an excellent reference volume; in fact, the very sources of the work are at hand.

There are 513 illustrations, splendid pen-and-ink drawings, by Willard C. Shepard. In many instances they are reproductions of classical illustrations, as Paget's sketch of osteitis deformans and Pierre Marie's case of acromegaly.

D. C. ELKIN, M.D.

BOOKS RECEIVED

Cancer, Its Origin, Its Development, and Its Self-Perpetuation. The therapy of operable and inoperable cancer in the light of a systemic conception of malignancy. A research by Willy Meyer, M.D., Consulting Surgeon to Lenox Hill and Post-Graduate Hospitals, New York Infirmary for Women and Children. Emeritus Professor of Surgery, New York Post-Graduate Medical School. Contains 427 pages. Publishers: Paul B. Hoeber, Inc., 76 Fifth Avenue, New York City. Price \$7.50.

Modern Methods of Treatment. By Logan Clendenning, M.D., Professor of Clinical Medicine, Lecturer on Therapeutics, Medical Department of the University of Kansas; Attending Physician, Kansas City General Hospital; Physician to St. Luke's Hospital, Kansas City, Mo. With special chapters on special subjects by H. C. Anderson, M.D.; J. B. Cowheard, M.D.; H. P. Kuhn, M.D.; Carl O. Rickter, M.G.; F. C. Neff, M.D.; E. H. Skinner, M.D., and E. R. DeWeese, M.D. Fourth edition. Contains 819 pages. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Mo.

COMMUNICATIONS

STATE TUBERCULOSIS SANATORIUM

To The Editor:

I was sorry that I did not have the opportunity to see you again before leaving last Thursday. Friday morning I went to Alto to see the work that they are doing there and was most favorably impressed with both the men and the work that they are doing. They fluoroscoped about fifteen pneumothorax cases for my special benefit, and did a number of pneumothoracies. They have about sixty children there taking treatment and going to school, observing the proper hours of rest and receiving the necessary diet. They look so much better physically than the average school children in Georgia until the inclination would be to turn them out and take the so-called healthy one in. As a matter of fact there is a great deal more childhood type tuberculosis in Georgia than has been recognized and I am sure the physicians throughout the state will receive knowledge and inspiration that will result in much good wherever Dr. Schenck holds the chest clinics. The great need at Alto as at other State institutions now, of course, is money.

You will recall that I spoke to you about getting information before the young physicians of Georgia that if they decide to read papers before the state

association, it would be necessary for them to send in titles before March 15. It seems that the average young physician is under the impression that he is to be invited to read a paper instead of making application to do so. I discussed this question at Alto and I found the same ideas prevailing there. I urged that a title for a paper be sent in, because the average physician, particularly in South Georgia knows nothing about the work being done there. Then, too, most physicians in Georgia are so far behind in the diagnosis and treatment of minimal tuberculosis that Alto should furnish a paper at each annual meeting. I am writing the secretaries of the Second District asking them to get titles of papers sent in during the next few days.

J. A. Redfearn, M.D.

Albany, Ga., March 2, 1931.

MEMBERSHIP AND DELEGATES TO A. M. A. To the Editor:

Section 3, Article V of the Constitution of the American Medical Association reads:

Sec. 3.—The total voting membership of the House of Delegates shall not exceed 175. The medical departments of the army and of the navy and the United States Public Health Service and the scientific sections shall each be entitled to one delegate, and the remainder shall be appointed among the constituent associations in proportion to their actual active membership as hereinafter provided in the By-Laws. (Amended 1925.)

Section 3, Chapter I of the By-Laws of the American Medical Association reads:

Sec. 3. *Apportionment of Delegates.*—At the annual session of 1925, and every third year thereafter, the House of Delegates shall appoint a committee of five on reapportionment, of which the speaker and the secretary shall be members. The committee shall apportion the delegates among the constituent associations in accordance with Article 5, Section III of the Constitution and in proportion to the membership of each constituent association as recorded in the office of the secretary of the American Medical Association on April 1st of the year in which the apportionment is made. This apportionment shall take effect at the next succeeding annual session, and shall prevail until the next triennial apportionment, whether the membership of the constituent association shall increase or decrease. (Amended 1925.)

The last reapportionment of delegates was effected at the seventy-ninth annual session held at Minneapolis in 1928. Another reapportionment will, therefore, be made at the eighty-second annual session of the Association to be held in Philadelphia, June 8-12, 1931. As the reapportionment will be made on the basis of the membership in constituent associations as that membership has been reported and recorded on the membership records of the American Medical Association on April 1, 1931, it is important that this office shall have complete reports of the membership of

your association, so that the names of all members may be duly recorded in this office before April 1, 1931.

This matter is brought to your attention now in order that you may remind the secretaries of your component county medical societies of the need of the fullest possible report of membership in their respective organizations.

Delegates already elected or to be elected for service in the House of Delegates for the eighty-second annual session of the American Medical Association in June, 1931, will be in no way affected by the reapportionment to be made in Philadelphia.

On March 1, 1931, the membership of the American Medical Association, which, of course, is the combined membership of its constituent state and territorial associations was 98,807. It is sincerely hoped that this splendid membership will be maintained and even increased by the affiliation of desirable and eligible physicians and that the membership in your state will be maintained at a figure that will insure that there will be no reduction of representation in the House of Delegates.

OLIN WEST, M.D., *Secretary,*

American Medical Association.

Chicago, Ill., March 9, 1931.

NEWS ITEMS

Dr. George H. Noble, Jr., announces the removal of his offices to 1526-7-8 Healey Building, Atlanta.

Dr. and Mrs. Ralph E. Russell, Fitzgerald, entertained the members of Ben Hill County Medical Society at dinner in their home on February 10th. Dr. W. P. Coffee, Fitzgerald, read a paper on "Diabetes".

The Spalding-Pike Counties Medical Society met at the Griffin Hospital, Griffin, on February 17th. Dr. M. F. Haygood, Alto, was a guest of the society.

The Jefferson County Medical Society met at the Jefferson Hotel, Louisville, on February 6th. Dr. John J. Pilcher, Wrens, read a scientific paper. The balance of the program consisted of reading, recitations, and music.

Dr. Joe P. Bowdoin, Atlanta, Deputy Commissioner of Health for the State, delivered an address before the White House Conference on Child Health and Protection in Washington on February 20th, entitled "The Menace of the Untrained Midwife".

The Whitfield County Medical Society sponsored a tuberculosis clinic which has been held with the assistance of a physician and a nurse from the State Tuberculosis Sanatorium, Alto, and an x-ray laboratory. People who had lived with tubercular patients and others who suspected the disease were invited to attend the clinic and be examined.

The Georgia Association of Workers for the Blind announces the week of April 19-26 as Sight Conservation Week. Charlie Chaplin plays the role of a tramp in love with a blind girl in a picture entitled "City Lights". Mr. Carris, of the National Society

for the Prevention of Blindness, in expressing his appreciation of the picture, says: "'City Lights' is particularly keen because it portrays with profound understanding the tragedy of blindness."

Dr. L. R. Casteel, Metasville, President of the Eighth District Medical Society, in his presidential address delivered before a meeting of the society in Athens on February 11th, urged the physicians to attend clinics and medical meetings; also to follow closely the latest developments of science in their field and to study scientific journals.

The Ware County Medical Society met at the Y. M. C. A. in Waycross on February 11th.

The Hall County Medical Society met at the Princeton Hotel, Gainesville, on February 4th. Dr. J. H. Downey, Gainesville, donated a supply of palatable steak for one course of the dinner which was served. Dr. H. S. Titshaw, Gainesville, was the speaker of the evening.

The United States Public Health Service has been requested to furnish to the International Conference on Educational Broadcasting which will convene in Vienna, Austria, during the coming summer, information as to the use made in the United States of radio broadcasting as a means of educating the public relative to matters of public health and personal hygiene.

The Fulton County Medical Society met at the Academy of Medicine, Atlanta, on February 19th. Dr. Samuel Stampa, Atlanta, read a paper entitled "Musculo Spiral Paralysis"; Dr. M. G. Campbell, Atlanta, delivered a clinical address on "Apoplexy of the Liver".

Dr. John G. Wilkins, retired City Health Officer of Atlanta, has been granted a pension by the Board of Trustees of the City Pension Fund.

A Trachoma Clinic was held at Bainbridge on February 20th by representatives of the United States Public Health Service, assisted by the members of the Decatur-Seminole Counties Medical Society.

The First District Medical Society met at Millen on February 26th. The scientific program was made up of the following titles: "Staphylococcus Speticemia—Report of Case," Dr. L. F. Lanier, Sylvania; "Gunshot Wounds—With Paralysis Following Injury," Dr. Charles Usher, Savannah; "Torsion of Undescended Testicle," Dr. William H. Myers, Savannah; "Malaria With Idiosyncrasy to Quinine—Treated With Plasmochin," Dr. W. W. Hillis, Sardis; "Anginal Form of Heart Failure," Dr. John M. Byne, Waynesboro; "Solitary Cyst of the Pancreas," Dr. H. L. Skinner, United States Marine Hospital, Savannah; "Pathological Physiology of the Rheumatic Heart," Dr. John W. Daniel, Savannah; "Essential Hypertension," Dr. W. R. Houston, Augusta; "The Diagnosis of Intra-Cranial Tumors," Dr. Charles E. Dowman, Atlanta; "Diverticulitis of the Colon," Dr. J. C. Metts, Savannah; "Treatment of Tri-Facial Neuralgia," Dr. L. W. Williams, Savannah.

The Floyd County Medical Society held its annual meeting in the dining-room of the Armstrong Hotel, Rome, on February 20th. Dr. M. F. Haygood, Medical Director of the State Tuberculosis Sanatorium, Alto, delivered an address on "Tuberculosis Control". The travel clinic maintained by the sanatorium held diagnostic clinics in Rome on March 16-17.

The Atlanta Tuberculosis Association held its annual meeting on February 19th. A report of the work of the Association for 1930 was as follows: 2,927 patients treated in the clinics, 1,715 families under care and observation, literature for health education distributed to 112,758 persons. Thirty cases were reported arrested.

Dr. C. J. Wellborn, Gainesville, attended the White House Conference on Child Health and Protection held at the White House, Washington, D. C., on February 19, 20, 21.

Dr. and Mrs. M. F. Haygood, Alto, entertained the members of the Habersham County Medical Society at the State Tuberculosis Sanatorium on March 6th.

Dr. E. B. Neal, Douglas, is taking post-graduate work at the Grady Hospital and Federal Penitentiary, Atlanta. He will return to Douglas in July and resume his practice with Dr. Thomas H. Clark.

Dr. T. F. Abercrombie, Atlanta, State Commissioner of Health, announces the immediate activities of three full-time health units supported by the drouth relief funds of the Federal Government. One district is composed of Chattooga, Dade, and Walker counties. The second, Catoosa, Gordon, Murray, and Whitfield. The third unit consists of a mobile field unit, composed of one health officer, one nurse, and one sanitary inspector for the State at large. This unit will be dispatched to any part of the State when needed.

Dr. T. H. Smith, Valdosta, was host to the members of the Lowndes County Medical Society at a dinner in the Valdes Hotel, Valdosta, on February 11th.

The sixteenth annual session of the American Public Health Association will be held in Montreal, Quebec, September 14-17. The Windsor Hotel will be headquarters.

The March issue of the *Radiological Review* is devoted entirely to radium. It is the fourth annual "Radium Number" of this publication.

Dr. James N. Brawner, Atlanta, read a paper before the Ninth District Medical Society at Gainesville on March 18th, entitled "Some Practical Points in the Prevention of Nervous and Mental Disorders".

The Fifth District Medical Society will hold its semi-annual meeting at the Academy of Medicine, 38 Prescott Street, N.E., Atlanta, on April 22nd. The following titles are on the scientific program: "Treatment of Acute Empyema by Closed-Tube Method—With Illustrations," Dr. Henry Poer, Atlanta; "Diagnosis and Management of Posterior Positions,"

Dr. R. A. Bartholomew, Atlanta; "Practical Management of Diabetes Mellitus," Dr. Harold M. Bowcock, Atlanta; "Rhinologist of Today," Dr. William C. Warren, Jr., Atlanta; "Tetanus Following Thyroidectomy—Report of Cases," Ben H. Clifton, Atlanta; "Cancer," E. L. Bishop, Atlanta; "Anal-Rectal Fistula," Dr. W. E. Person, Atlanta; "Rupture of Kidney—Report of Cases—Illustrated," Dr. Earl Floyd, Atlanta; "Drugs Used in Circulatory Diseases," Dr. E. D. Shanks, Atlanta; "Fracture of the Skull and Its Present-Day Treatment," Dr. E. F. Fincher, Jr., Atlanta.

Dr. S. A. Boland, formerly of Thomson, has removed to Jefferson.

The Phi Chi Medical Fraternity held its annual banquet at the Piedmont Hotel, Atlanta, on February 26th.

The Atlanta Neurological Society held its regular meeting at the Academy of Medicine, Atlanta, on February 27th. Dr. Geo. Bachmann read a paper entitled "Inhibition".

The Staff meeting of St. Joseph's Infirmary, Atlanta, was held on February 24th.

Dr. S. D. Gausemél, Atlanta, read a paper before the Medical Staff meeting of the Atlanta Tuberculosis Association on February 26th, entitled, "Pulmonary Tuberculosis with Probable Exophthalmic Goiter".

Office of Motion Pictures of the United States Department of Agriculture has produced a two-reel film, entitled "Food Makes a Difference". The production was sponsored by the Bureau of Home Economics. The film represents children of varying ages, white and colored. Some are thin and undernourished with stooping backs and winged shoulder-blades, others are fine and healthy, bright-eyed, laughing, sturdy, and well nourished with straight backs and legs, showing by contrast that food does make a difference. The films are made primarily for scientists, specialists, and extension workers in carrying on their work, and are loaned free, except for transportation charges from Washington. When copies are available, they are loaned to other agencies, such as schools and churches.

Dr. M. L. B. Clarke announces the removal of his office to 403 Candler Building, Atlanta.

The Georgia Conference on Social Work was held in Athens on March 4, 5, 6. Dr. Wm. A. Mulherin, Augusta, delivered an address entitled "Medical Service—Applying Suggestions of the White House Conference to Georgia"; Dr. T. F. Abercrombie, Atlanta, spoke on "Public Health"; Dr. G. Y. Moore, President of the Association, read a paper entitled "Georgia's Children".

The Randolph County Medical Society met at the Woman's Club room, Cuthbert, on March 12th. Memorial exercises were held for Dr. F. D. Patterson. The program was arranged by Dr. A. L. Crittenden, Dr. F. M. Martin, and Dr. E. C. McCurdy, all of Shellman.

The Tenth District Medical Society held its mid-winter meeting at the United States Veteran's Hospital, No. 62, Augusta, on February 25th. The titles of papers read before the meeting were as follows: "Multiples Sclerosis", by Dr. S. T. R. Revell, Louisville; "The Clinic", by Dr. Geo. L. Echols, Milledgeville; "Negro Pathology of Corn Syndromes", by Dr. R. L. Harris, Augusta; "Intra-Cranial Neoplasms", by Dr. Chas. E. Dowman, Atlanta; "What Every Doctor Should Know", by Dr. Jas. M. Hull, Augusta.

The Terrell County Medical Society met at the county court house, Dawson, on February 27th. Dr. Logan Thomas, Dawson, read a paper entitled "Endamoeba Histolytica"; Dr. J. G. Dean, Dawson, spoke on "Malaria"; Dr. S. P. Kenyon, Richland, delivered an address on "Public Health"; Dr. A. E. B. Alford, Bainbridge, was a guest of the society and discussed the papers. Dr. Wm. P. Durham, Sasser, will read a paper at the April meeting, entitled "Apocynum".

OBITUARY

Dr. James C. Watts, Rome; member; Eclectic Medical College, Cincinnati, Ohio, 1881; aged 71; died at his home on Ninth Street on February 3, 1931. He was born at Cave Springs. Doctor Watts moved to Rome in 1904 and was actively engaged in practice there until the time of his death. He was a prominent Mason and served as Master of the lodge at Cave Springs and in Rome. Doctor Watts was a member of the Floyd County Medical Society and the American Medical Association. Surviving him are his widow, four daughters, Mrs. L. H. Pearce, New York City; Mrs. W. B. Gilmore, Mrs. F. S. Cooper, Miss Louisa Watts, all of Rome; three sons, William B. Watts, Charleston, W. Va.; George T. Watts, James Watts, Jr., both of Rome.

Dr. Thomas Lovick Nolan, Marietta; Emory University School of Medicine, Emory University, Ga., 1928; aged 28; was reported missing from the S. S. *Exilona* between Gibraltar and Malta on January 16, 1931. He was a graduate of the Marietta High School and the Virginia Military Institute. Doctor Nolan served as an interne at Wesley Memorial Hospital, Emory University, and at the Knickerbocker Hospital, New York City. He had accepted the position as the ship's surgeon and was on his initial trip when lost. Surviving him are his mother, Mrs. Charles T. Nolan, Marietta; one brother, Burwell Nolan, Charlotte, N. C.; one sister, Mrs. Tom Turner, High Point, N. C.

Dr. Hugh Angus Macaulay, Waynesboro; member; University of Louisville School of Medicine, Louisville, Ky., 1908; aged 45; died of pneumonia at his home on February 4, 1931. He was born at Winnsboro, S. C. Doctor Macaulay was a prominent physician and enjoyed an extensive practice. He took an active interest in civic and social affairs. He was a member of the Masons, Shrine, Burke County Medical Society, and the American Medical Association. Surviving him are his widow, one daughter, Mrs. Rosa Moore; one son, Hugh A. Macaulay, Jr. Funeral

services were conducted by Rev. George M. Agree from the First Methodist Church, and interment was in Magnolia Cemetery.

Dr. James Nimmo Ellis, Atlanta; member; Medical College of Virginia, Richmond, 1889; aged 67; died at his residence on Ponce de Leon Avenue after a lingering illness on February 11, 1931. He was born in Buckingham County, Virginia. Doctor Ellis was an eminent surgeon and had taken post-graduate courses in Vienna, London, Paris, and Berlin. He served in the medical corps of the United States Army during the World War and wrote a number of monographs on surgery. Doctor Ellis was President of the Georgia Chapter of the Pan-American Surgical Association, member of the Fulton County Medical Society, American Medical Association, and the Episcopal Church. Surviving him are one sister, Mrs. Alex Hall, Buckingham, Va.; two brothers, Frank Ellis, Birmingham, Ala., and Perkins Ellis, Buckingham, Va. Funeral services were conducted from the residence by Dr. Richard Orme Flinn, and interment was in Oakland Cemetery.

Dr. W. F. McCurdy, Weston; member; Emory University School of Medicine, 1884; aged 71; died of pneumonia at a private sanitarium in Plains on February 6, 1931. He had practiced medicine and surgery in and around Richland for more than forty years and was surgeon for the Seaboard Air Line Railway Company for a number of years. Doctor McCurdy was a member of the Masonic Lodge, Stewart-Webster Counties Medical Society, American Medical Association, and the Baptist Church. He is survived by one daughter, Mrs. Lee Cannon, Albany. Funeral services were conducted by Rev. M. B. Brown, Richland, and Rev. J. D. O'Keefe, Weston, from the Harmony Baptist Church. Interment was in the Richland City Cemetery.

Dr. Samuel Joseph Chesnut, Bainbridge; University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, 1892; aged 68; died at his home on February 10, 1931.

Dr. George Luther Loden, Colbert; member; Emory University School of Medicine, Emory University, 1914; aged 43; died at his home after an illness of several months' duration on February 13, 1931. At the time of his death he was a member of the City Council of Colbert, Mayor pro tem., and chairman of the Board of Education. Doctor Loden was a native of Franklin County and received his early literary education in Cornelia. He was a member of the Masonic Lodge, Woodmen of the World, Madison County Medical Society, American Medical Association, and the Baptist Church. The doctors of Madison and Clarke counties, with a score or more from Atlanta, acted as an honorary escort. Surviving him are his widow, two daughters, Misses Mary Louise and Anna Christine Loden; two sons, Harold and Bernard Loden. The funeral services were conducted from the Baptist Church

by Rev. F. J. Hendrix. Interment was in the Colbert Cemetery.

*"Stone walls do not a prison make
Nor iron bars a cage"*

Winter is a jailer who shuts us all in from the fullest Vitamin D value of sunlight. The baby becomes virtually a prisoner, in several senses: First of all, meteorologic observations prove that winter sunshine in most sections of the country averages 10 to 50 per cent less than summer sunshine. Secondly, the quality of the available sunshine is inferior, due to the greater distance of the sun from the earth, altering the angle of the sun's rays. Again, the hour of the day has an important bearing: At 8:30 a.m. there is an average loss of over 31 per cent, and at 3:30 p.m. over 21 per cent.

Furthermore, at this season, the mother is likely to bundle her baby to keep it warm, shutting out the sun from baby's skin; and in turning the carriage away from the wind, she may also turn the child's face away from the sun.

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CARCINOMA OF THE URETER*

JOHN B. CROSS, M.D.
Atlanta

Carcinoma originating in the ureter has been the subject of three extensive papers since the first of the year. According to these papers a total of sixty-three cases has been reported.

As there is no characteristic symptom complex of carcinoma of the ureter, the diagnosis is difficult. A pre-operative diagnosis was made three times in forty-three cases and suspected in nine others. It is usually made at necropsy. The duration of life in these cases is short. The symptomatology is varied and indefinite. Pain and hematuria are almost always present. The pain may be located in the abdomen, genito-urinary tract, or in the region of the hip and radiating along the thigh. There may be anything from dull aching to sharp knife-like pain. The blood in the urine may be only microscopic or it may appear as gross hemorrhage. On cystoscopic examination in my case blood came from the right ureteral orifice in such qualities as to suggest that it came from a small severed vein. A tumor is often palpable and hydronephrosis occurs frequently. Other symptoms depend upon the size and location of the lesion and whether or not there is obstruction.

Ureteral invasion by malignant tumors in the pelvis is rare, occurring four times in five hundred cases.

REPORT OF CASE

History.—A white man, age 48, was seen by me first on August 27, 1929, at which time he complained of dysuria and pain in the right lumbosacral region. The family history was irrelevant. His general health had been good. His appendix was removed by Dr. John B. Murphy in 1905, and his gall bladder in 1915. He had been addicted to morphine for fourteen years.

Eight weeks previous to his admission to the hos-

pital, he began to suffer with pain in the right lumbar region. This varied from a dull ache to pain of such a character as to simulate renal colic. Urination was at times frequent and painful. He had lost a little weight during the preceding few weeks.

Physical Examination.—The patient was well developed but poorly nourished. The skin was dry. There was no enlargement of thyroid nor of any superficial lymph nodes. The blood pressure was 154 systolic; 100 diastolic. The abdomen was scaphoid and its muscles well relaxed, which allowed thorough palpitation. No masses were palpable, except the cecum which could be felt and was somewhat fixed. Rectal examination was negative; the prostate was of normal size and consistency. The urine contained gross blood. The white blood count was 12,800, hemoglobin 85 per cent (Dare), and blood chemistry was essentially normal.

Roentgen Examination.—The chest showed increased peri-bronchial fibrosis. There was evidence of cecal stasis. A flat plate, of the kidneys, ureters and bladder, was negative for stones.

Cystoscopic Examination.—Sept. 9, 1929, the bladder mucosa was normal in appearance except around the right ureteral orifice where the vessels were more prominent than usual. No masses or ulcerations were seen. The left ureteral orifice was in its normal location. A No. 6 catheter was passed without difficulty. Following the intravenous injection of phenolsulphonphthalein, about 50 per cent of the dye was recovered from the left kidney in twenty minutes. No growth protruded, but a stream of what appeared to be pure blood was seen escaping from the right ureteral orifice. A No. 6 catheter entered this orifice without difficulty but encountered obstruction at 7 cm. No urine was obtained through this catheter. One week later a second examination was made by Dr. M. K. Bailey, with similar observations. A pyelogram of the left side was normal. An attempt was made to obtain a uretero-pyelogram of the right side by using a No. 6 catheter; a Garceau catheter was also used with patient in the Trendelenburg position, but the opaque material ran back along the catheter into the bladder. A third cystoscopic examination three weeks later showed nothing abnormal within the bladder except blood escaping from the right ureteral orifice and obstruction to the passage of a No. 4 catheter.

Course.—A few days after the patient was admitted to the hospital he was given 300 c.c. of whole blood. One week later this was repeated. The patient continued to suffer with recurrent gross hematuria. At times the urine appeared almost like whole blood, at others it would show only a few red cells on micro-

*Read before the Medical Association of Georgia, Augusta, Ga., May 16, 1930.



High-power photomicrograph of section from tumor.
(Courtesy of Dr. E. L. Bishop and Steiner Cancer Clinic.)

scopic examination. The patient continued to complain almost constantly of pain. Swelling of the entire right leg and foot was noted, varying in amount; at times the right leg was almost twice the size of the left, and within a few days it might be only slightly larger.

On December 12th the patient was prepared for operation. There was a sudden change in his daily urinary output, from 2,000 to 290 c.c., but he showed no signs that would suggest uremia. However, it was considered advisable to postpone operation. The patient continued to grow weaker but the urinary output soon increased to as high as 2,790 c.c. The patient died Jan. 20, 1930.

Necropsy.—No free fluid was present in the peritoneal cavity. The cecum was fixed to the abdominal wall; the liver was about normal in size, but showed a few whitish areas scattered over its surface. In the left lobe there was a hard white nodule about an inch in diameter; the spleen was of normal size but had many small white nodules scattered throughout the parenchyma. Over the right sacro-iliac area where the ureter entered the pelvis there was a hard mass about the size of a lemon which cut with a gritty-like sound to the knife. The portion of the right ureter proximal to the mass was greatly distended. The right kidney was markedly enlarged. On sectioning it, cystic degeneration of the entire parenchyma and dilatation of the pelvis with retention of brownish fluid were seen. The left kidney was greatly hypertrophied, but appeared otherwise normal. The large vessels to the right leg were well within the mass and both arteries and veins showed some evidence of obstruction. A few hard nodules were seen in the left lung.

Microscopic Studies.—The ureteral tumor, the nodule from the liver, and the retroperitoneal lymph nodes were diagnosed adenocarcinoma by Dr. John Funke. The pulmonary lesions were tubercles.

Comment

Repeated cystoscopic examinations were done in this case and no evidence of a neoplasm of the bladder was found. If neoplasm of the ureter had been suspected earlier in the course of this patient's illness, an exploratory operation would have been worthwhile. Since a positive diagnosis could not be made following cystoscopic examinations, it was considered advisable to postpone an exploratory operation. It was thought that if this mass was a non-opaque stone or ureteral stricture, some benefit might be obtained from dilatation of ureter.

Since no repeated cystoscopic examinations, as well as at necropsy, no evidence of tumor of the bladder was found, since ureteral invasions by malignant lesions of the pelvis is infrequent and since the microscopic pictures are like those reported in other cases of carcinoma of the ureter, I feel that I am justified in saying this is a case of primary carcinoma of the ureter with metastases to the retro-peritoneal glands, liver and spleen.

Summary

Carcinoma of the ureter is rare and the diagnosis is difficult as there is no characteristic symptom complex. A case is reported with necropsy.

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D'Aunoy, R. D., and Zoeller, Adelaide: Primary Carcinoma of the Ureter, *Arch. Path.* 9: 17 (Jan.), 1930.

DISCUSSION ON PAPER OF DOCTOR CROSS

Dr. Walter Holmes, Atlanta, Ga.—I have never had the opportunity of seeing a case of primary carcinoma of the ureter. All the cases of neo-plastic involvement of the ureter that I have seen have been secondary to new growths of the kidney or renal pelvis. From what Doctor Cross tells us, the diagnosis of primary carcinoma of the ureter is one of extreme difficulty. In only three cases has an accurate diagnosis been made. It would seem to be almost impossible with the means at our disposal to make an accurate early diagnosis in all cases. We should keep in mind the possibility of a malignancy of the ureter where there is an obstruction at some point in the ureter and where there is a definite filling defect in the ureterogram. With such findings, other causes for obstruction being eliminated, one would be justified in exploring the ureter in the hope of arriving at an early diagnosis.

I wish to ask Doctor Cross what he considers the source of a primary adeno carcinoma of the ureter. The

ureter is lined with transitional epithelium and has no glandular structures.

Dr. John B. Cross, Atlanta, Ga. (Closing).—I wish to thank Doctor Holmes for his discussion of my paper. In answer to the question as to the origin of adenocarcinoma in the ureter I would call his attention to a recent issue of *Surgery, Gynecology and Obstetrics* in which the author reports a review of the literature and gives a classification of tumors of the ureter. In this he calls attention to adenocarcinoma as one of the types.

THE VALUE OF THE ELECTRO-CARDIOGRAPH TO THE GENERAL CLINICIAN*

JAMES A. FOUNTAIN, M.D.
Macon

It was discovered in 1856 that when the heart contracted an electrical current was produced. In 1887 Waller demonstrated that this current could be recorded from the heart if proper conduction was made to a galvanometer. It was Einthoven who in 1903 perfected the electrocardiograph to such an extent that it could be used advantageously in a clinical way. Einthoven published his clinical studies in 1906. About 1910 the electrocardiograph came into use in the larger clinics and hospitals in this country. At first many of the earlier users of the cardiograph were over-enthusiastic and made statements as to the value of an electrocardiographic examination which could not be substantiated from clinical and post-mortem findings. This caused a widespread doubt as to the value of electrocardiographic examination. This same experience has happened to other valuable discoveries such as x-ray, radium, cystoscopic examination, and basal metabolism, all of which have proved to be valuable to the progress of medicine when applied properly.

Electrocardiography is based on the fact that the passage of the wave of excitation over the heart is accompanied by an electrical discharge which may be recorded by means of a galvanometer on sensitized paper or film. If any portion of the foregoing mechanism fails in its proper coordinated function either from the standpoint of time, place or intensity, a disordered mechanism and usually

cardiac arrhythmia will result.¹ The cardiac nerves have apparently both a direct and indirect modifying and controlling function. The normal stimulus contraction is received at the sino-auricular node and this impulse is transmitted over the conduction system through the auricles and then to the ventricles through the bundle of His. The sino-auricular node is in part composed of fibers from the vagus and sympathetic nerves and the function of this node is to control the rate at which the impulses are given out in the auricles. The normal impulse through the sino-auricular node reaches the auriculoventricular node or the bundle of His and is transmitted at great velocity through its two branches and their ramifications. When there is disease of the myocardium there is a disturbance in the conduction of the impulses over these paths. When the heart muscle is diseased either by toxins or drugs, these impulses may be received in the walls of the auricles or ventricles and thus interfere with the normal contraction of the heart. This abnormal impulse is distinctly shown by the electrocardiogram.

The electrocardiogram is the most accurate and reliable method of diagnosing disturbances in the rate and rhythm of the heart beat. Extrasystoles or premature contractions are the most frequent disturbances of cardiac rhythm. These abnormal contractions of the heart generally arise from some other portion of the heart than the sino-auricular node which is the normal pacemaker. These extrasystoles may originate in either the walls of the auricles or the ventricles. Occasionally there is a type which originates in the tissues that lie between the auricles and the ventricles.

Subjective sensations are more common and pronounced in this form of arrhythmia than in any other, especially if the premature contraction arises in the ventricle and is accompanied by a compensating pause. The patient refers to this condition by saying his heart flops, stops, turns over, or palpitates. There are numerous causes for this disturbance and an electrocardiogram is indicated, for if the cause is found and corrected it might prevent serious heart disease. Preven-

*Read before the Medical Association of Georgia, Augusta, Ga., May 16, 1930.

1. Norris and Landis, *Disease of the Chest*, Fourth Edition.

tive medicine can be practiced in heart disease as in tuberculosis and cancer.

Auricular flutter is a condition where the pulse rate is regular and very rapid due to impulses received in the auricle that move around in the same direction. This moving of the impulses is called circus movement. The pulse rate may reach three hundred and seventy-five beats per minute. Auricular fibrillation is a condition very similar to auricular flutter but the rhythm is not regular. These two conditions are hard to diagnose without the aid of the electrocardiograph. They usually occur in hearts which are diseased and are usually seen in people past mid-life. They usually respond very satisfactorily to therapy, either digitalis or quinidin.

Heart-block is another disturbance of the function of the auriculoventricular conduction system and it may cause various disturbances of the heart action. The rate may be from twenty to one hundred or more beats per minute, and this is a fact that is not generally recognized.² A slow heart does not necessarily mean heart-block nor does a rapid heart mean that heart-block is not present. Sometimes a partial heart-block may develop into a complete heart-block. In this condition where patients have Adams-Stokes-Syndrome electrocardiographic records are very enlightening.

There is another arrhythmia seen quite often which is a normal process in early life, and is most frequently noticed by mothers who are over-anxious about their children and take the pulse quite frequently and find that it is irregular. Upon examination it is usually found that this is a normal process where the pulse has accelerated during inspiration and slows during expiration. This is due to changes of the vagal tone and comes under the head of sinus-arrhythmia. This is very readily diagnosed by the electrocardiogram.

In the diseased myocardium in which there is no sign of decompensation such as shortness of breath, edema, or murmur, electrocardiograms show a characteristic disturbance of the Q.R.S.-wave. In hypertrophy of the heart muscle the electrocardiogram is of value in determining which muscle is larger in pro-

portion. The greater the hypertrophy the greater the degree of accuracy in estimating hypertrophy by axis deviation. Hypertrophy of the right ventricle is caused by pulmonary artery disease with narrowing and quite often is due to syphilitic conditions. Chronic emphysema and certain congenital abnormalities such as patent interventricular septum, pulmonary stenosis, patent ductus arteriosus, would cause hypertrophy, but a patent foramen ovale would not. Mitral stenosis leads to hypertrophy of the right ventricle due to damming of blood in the pulmonary capillaries. Hypertrophy of the left ventricle is caused by disease such as myocardial degeneration, mitral regurgitation, and by aortic valve diseases, either stenosis or regurgitation or by arterial hypertension.

The ventricular wave is subject to variation in height, form, and width as a result of disease of the ventricular muscle. These ventricular waves vary extremely in different patients. It is rare to see two patients having similar waves. The state of nutrition of the heart muscle will cause a variation of the Q.R.S.-complex and the R.T.-interval. Auricular hypertrophy will cause a change in the P-wave which is usually caused by venous congestion in the pulmonary and systemic veins. Mitral stenosis also causes a marked hypertrophy of the auricles.

Since Herrick has called attention to the disease of coronary vessels and myocardial infarction, the diagnosis of myocardial occlusion and infarction can be made during life with a marked degree of certainty if the clinical history and physical examination were well made. Since the application of electrocardiography by many workers this diagnosis can be made with a greater degree of certainty.³ Barnes and Whitten have done a great deal of work along this line and they have been able to locate lesions in different areas of the myocardium due to occlusion of the coronary vessel by the characteristic R.T.-intervals in the various leads.

In valvular diseases of the heart, the electrocardiogram is not of as much value as in the above mentioned condition, but when taken with a proper correlation with the findings of the physical examination, they are a

2. Clinical aspects of the Electrocardiogram, Harold E. B. Pardee. Second Edition, revised.

3. American Heart Journal, December, 1929. Arlie R. Barnes, Merritt B. Whitten, Rochester, Minn.

great help especially in mitral stenosis. In this condition the tracing is very characteristic and quite frequently a diagnosis can be made from the tracing alone. In mitral disease it is varied due to the preponderance of the muscle which causes changes in the axis deviation. In congenital disturbances of the heart the curves are quite often of great value in making a diagnosis.

Digitalis has a characteristic action on the T-wave of the electrocardiogram and has great value in treating heart disease for the doses can be determined by this method much better than waiting for symptoms such as nausea, vomiting, and diarrhea.

The electrocardiograph should be used more frequently in infectious diseases than it is used at present, especially diseases such as rheumatism, tonsillitis, diphtheria, typhoid fever, influenza, and arterial hypertension. Fortunately in this section of the country rheumatism is not as severe as it is in the East and North, but quite frequently we find cases which do not clear up under treatment as well as they should, and in these cases if there is electrocardiographic evidence of myocardial involvement when a diagnosis could not be made clinically of myocardial involvement the patient should be kept under treatment although he appears to be well.⁴ Many authorities think that the heart is involved in rheumatic infection even though a clinical diagnosis cannot be made. In diphtheria where a patient has not had the antitoxin until several days after the infection is well established, and the patient does not clear up as rapidly as he should, and there are any abnormalities of the heart beat, an electrocardiogram is indicated for in this disease the toxins expend their energy on the heart muscle and quite often produce severe myocarditis which if diagnosed early will prevent serious cardiac complications and possibly death. In severe cases of typhoid fever where a patient has been in bed for two, three or four months there is usually some myocardial intoxication and the electrocardiogram quite often can give best insight as to the amount of damage which has taken place. Recently I had a patient who had typhoid fever for over three months and after his

temperature returned to normal and he felt strong enough, he returned to his work and tried to stay up all day although he had been warned not to over-exert himself. After he had been up he had a severe attack with his heart and generalized edema and he had to be kept in bed for another month with a decompensating heart. In cases of influenza where there is marked tachycardia after the patient has recovered from his acute symptoms and when there are subjective symptoms, electrocardiography is quite helpful in making a diagnosis of myocardial disturbance and the patient can be warned and severe heart disease prevented.

Conclusion

I do not wish to convey the idea that by the electrocardiogram a positive diagnosis of heart disease can be made, but with the aid of a well taken history and a careful physical examination, that it is the most valuable graphic method to aid in diagnosis and prognosis of heart disease.⁵ In two patients both having the same valvular lesions, blood pressure, and living in the same environment financially and socially, one having a normal electrocardiogram and the other having an abnormal electrocardiogram, the one with the normal electrocardiogram would have a better outlook. Willius has shown that patients who have abnormal Q.R.S.-complexes and T-waves have an average expectancy less than those without abnormalities. When we find a normal electrocardiogram it can not be stated positively that there is no disease of the heart muscle, but when an abnormal electrocardiogram is found we say with a great degree of certainty that there is disease of the heart.

Glossary⁶

Lead or Derivation I. The current of electricity passing from the electrodes on the right arm and the left arm derived chiefly from the base of the heart.

Lead or Derivation II. The current passing from the right arm and left leg corresponding to the long axis of the heart.

Lead or Derivation III. The current passing from the left leg and left arm approximating largely the left side of the heart.

4. New England Journal of Medicine, March, 1928, William D. Reid, M.D., Lawrence L. Kenway, M.S.

5. Harold E. B. Pardee.

6. John Miller Wilson, M.D., International Clinics, Pasadena, Calif.

Normal electrocardiogram. A series of waves or deflections which have been termed P, Q, R, S, T, and U.

P-wave. An upward or positive curve about 2 mms. in height and about 1/10 second duration. It represents the electrical excitation wave which precedes the contraction wave in the auricles and is known as the auricular complex.

Q-wave. A short downward or negative wave not always constant which represents the beginning of that excitation wave which precedes the contraction of the ventricles and is followed immediately by the R-wave.

R-wave. A positive curve about 2 cm. in height and is the major curve of the Q, R, S complex. In the first lead a left ventricular event and in the third lead a right ventricular event.

S-wave. A sharp negative curve immediately following the R-wave. In the first lead a right ventricular event, and in the third lead a left ventricular event.

T-wave. A broad, blunt, positive curve at the end of the contraction of the ventricles, separated from the R and S waves by a prolonged period in which the string is iso-electric.

U-wave. An inconstant, positive curve usually at the beginning of the diastole.

Ventricular complex. The summation of the Q, R, S and T waves representing the ventricular systole.

P-R interval. The time period between the contraction of the auricles and the contraction of the ventricles normally is from .12 second to .20 second in time.

R-R interval. The time in fraction of a second, or a complete cardiac cycle from which the pulse rate is determined.

Iso-electric. Term used to denote that the galvanometer string stands at zero.

Diphasic. Term used to denote that the curve gives both a positive and negative deflection.

Diastole. The space between the T-wave and the P-wave in which the string is usually iso-electric.

Arborization block. Notching or slurring of the R-waves with the corresponding T-wave in the opposite direction signifying

presence of a lesion in one of the arborization branches of the conduction system.

Left preponderance. A relatively increased amplitude of the R-wave in lead 1 and of the S-wave in lead 3.

Right preponderance. A relatively increased deflection of the S-wave in lead 1 and of the R-wave in lead 3.

DISCUSSION ON PAPER OF DOCTOR FOUNTAIN

Dr. J. G. Bachmann, Emory University, Atlanta, Ga.—I wish to compliment Doctor Fountain on the excellence of his paper. We all appreciate the difficulty of presenting so complex a subject in so short a time. His paper illustrates very well the fact that advances in medicine are in great part dependent on new methods of detecting disease. The electrocardiograph, I think, is the greatest advance made in the study of cardiac affections since Laennec invented the stethoscope. Nevertheless, it is just as important now as ever was the case, in making a study of the heart, to carry out the usual clinical examinations. It is only by such means that we can determine the dynamics of the heart, and since it is the function of this organ to propel the blood through the vascular apparatus, it is evident that we should have accurate information regarding this function. The electrocardiograph gives information of another order, for with this instrument it is possible to trace the path of the excitatory process. The form of the electrocardiogram is determined by the site of origin of the excitatory wave and the path it follows. Any variation in either, or both of these factors, will make itself manifest in the electrocardiogram. The electrocardiograph is, therefore, of the greatest assistance in making a complete diagnosis of the functional condition of the heart.

I am not as sanguine as Doctor Fountain apparently is concerning the ability of the electrocardiograph to demonstrate at all times the condition of the myocardium. There are areas in the heart, just as in the brain, that are silent areas; it is only when pathological processes affect the conduction system that evidence of it appears in the electrocardiogram. In myocardial involvement in which this system escapes, there may be no evidence of the damage in the electrocardiogram. It is, nevertheless, the best method available for the detection of myocardial disturbances. Recent studies in reference to the form of the T wave in various leads give promise in this direction. The use of the electrocardiograph is without a doubt a step in the direction of making medicine more truly scientific, a matter in which we are all greatly interested.

Dr. James A. Fountain, Macon, Ga. (closing).—I realize that there are silent areas in the heart muscle and if a small part of one of these areas is diseased it may not cause any disturbance in the electrocardiogram, but if the diseased area is large enough to produce clinical symptoms it usually produces some evidence in the electrocardiographic tracings.

PNEUMONIA AND SOME PRACTICAL METHODS OF TREATMENT*

J. F. ANDERSON, M.D.

Hillsboro

The definition of pneumonia is an inflammation of the lungs. The varieties, depending upon their causes, which are traumatic, chemical, as by introduction of corrosive gas or liquids into the bronchi and air sacks; and inflammation of the lungs by various cocci, generally pneumococci and streptococci. The inflammatory variety has been differentiated by pathologists into twenty different strains. Yet, at the bedside, it is only possible for the physician to differentiate three grand divisions, broncho-pneumonia, as most frequently seen in the young, the feeble, and the aged; croupous or lobar pneumonia, and catarrhal or lobular pneumonia, appearing sporadically or in epidemic form frequently, as a complication of la grippe.

In this short essay no mention will be made of the clinical course or pathological findings in pneumonia. In the handling of these three forms of pneumonia, there are some measures applicable to all, such as plenty of good, fresh air, hygienic surroundings, careful dieting. One is likely to have a more favorable outcome in a log cabin out in the country where good ventilation can be obtained from every direction, than in a tightly sealed house, well heated and located in the dust-laden atmosphere of the city. A cold temperature does not have any bearing upon the course of pneumonia if the patient occupies a clean, well-dressed bed and gets plenty of fresh air. The secretions from kidneys and bowels should be caught in a bedpan and immediately removed from the room, the patient remaining in a recumbent position as much as possible. The products from the nose and throat and bronchi should be received in an antiseptic solution. The nose and throat should receive a swabbing about every four hours with some suitable antiseptic, as alkaline elixir or borax solution, for the throat and nose are generally the points of entrance of the pneumococci and, therefore, the first locations affected. With these pre-

liminaries, see that the patient has plenty of pure, cold water, but no food until the alimentary tract is well cleansed and, if possible, antiseptized with suitable doses of calomel, followed by castor oil or phosphate of sodium. Ever remember that, in the presence of high fever from any cause, digestion is very difficult; therefore, no food during the first twenty-four to thirty-six hours. Again, let us remember that fever in moderation is physiological. It is the fire that consumes toxins and waste products. We should not permit that fire to become too severe, else the tender structures of the brain and nervous system become affected and the patient becomes delirious. Keep the fever below 103. To do this we have three means, the first of which is very frequent bathing in tepid water over the body, constant use of ice caps and a copious amount of cold drinking water. Second means of control is by free elimination from the bowels, kidneys, and skin, to rid the system of toxins. Third, by the judicious use of such potent drugs as aconite or veratrum veride. Here, I know some good doctors will demur. But let me say to them that there is nothing like knowing the physiological action of these drugs, and, in skilfull hands, brilliant results quickly follow their use. Yet I never use them with the aged and feeble or in any case where there are structural heart lesions. Herein is registered the peculiar function of the doctor. He must not only know the physiological action of these drugs but he must know his patient, the general physical stamina, and the condition of the lungs, heart and kidneys, by thorough examination. Do not guess any more than can be helped and be a skillful master in the use of the tools or drugs.

The means above referred to I have employed in the treatment of all three varieties of pneumonia, but veratrum and aconite should be used only in sthenic cases in the primary part of the attack, seldom after thirty-six to forty hours from the initial chill and never when there is a damaged heart. All old people have hearts more or less worn or damaged. They seldom run high fevers, hence nothing but heart supporting measures should be used for them. Their hearts do not need bridling with such depressive medicines as aconite and veratrum.

*Read before the Sixth District Medical Society, Macon, Ga., December 3, 1930.

In the conduct of pneumonia it is well to employ, as needed, several adjuvants, such as weak mustard plasters, over the affected area, local applications of heat and moisture, as hot water bags or a good old-fashioned poultice, for these topical applications are generally very beneficial to the patient, as they help to relieve pain. But if the pain is severe and too persistent, do not hesitate to use an opiate, else the patient will become worse. Sometimes we have to strap or bind up the side to restrain motion. Every case of pneumonia, in many respects, is a law unto itself. We occasionally find many complications, as gas forming in the bowels, producing very distressing symptoms, for which I prescribe suitable doses of calcium lactate with a little turpentine, every three hours until gas disappears. Or we may have to again "unload" the patient with three or four small doses of calomel and aid its action with high enemas of warm normal saline. That reminds me that the blood of the patient will be found deficient in saline, such as calcium, and chloride of sodium. This is worthy to be remembered. Therefore, apply these salines. Furthermore, the doctor himself, going through an epidemic, many times bending over the sick, becomes a target for the coughing patients and should keep himself loaded up on soda and salt for self-protection.

The above is a narrative of means and measures applicable to most pneumonias in the initial stages lasting about thirty-six to forty-eight hours if not sooner aborted. By that time the alimentary canal should be thoroughly cleaned out, the tumultuous heart bridled and toned down, so that it pumps blood into the inflamed area very softly. The fever has been moderated, the side pain made bearable, and every gland in the body has been stimulated to increased work by the calomel and discharging per *prima via*. Thence there is needed supporting treatment, proper diet, digitalis and strychnine. Here, let me say of digitalis, two-thirds of the samples bought from the drug stores are utterly unreliable. Many patients succumb to heart failure by reason of the use of an inferior and unreliable digitalis product. Therefore, in prescriptions, always specify the essayed product, as put up by reliable firms. True, it costs a dollar and fifteen cents more per pint

than the ordinary tincture, but it gives results, in slowing and strengthening the heart, and the heart is the main organ to watch.

Here, mention is made of other adjuvants which may be employed as the doctor sees fit. The late Dr. Charles Mateau, of Macon, said: "If a doctor discards the use of quinine, he loses a very valuable weapon in the treatment of pneumonia." A Norwegian physician has perfected a solution of quinine put up in ampules for intravenous injection as "the specific" in pneumonia. I have had no experience with it and give quinine only by the mouth to produce phagocytes, but with the least head or ear disturbance quinine should be left off. Cough mixtures are a nuisance except for the opiate which they usually contain. In the latter stages a more liberal liquid diet may be given and occasionally good whisky, about a tablespoonful diluted as in eggnog.

We now have a resume of drugs used in the treatment of pneumonia, leaving off the adjuvants. At the head stands mercury in the form of calomel. We cannot state altogether its specific actions, but we do know it is the finest intestinal germicide in the materia medica and also is a great eliminant. No other drug so stimulates the general glandular system. And here let us remember some of the special functions of the thousands of glands in the human body. They take up toxins from the blood and discharge said toxins through the bowels and kidneys. But when the glands become dormant, overwhelmed by masses of toxins and bacteria, then it is that calomel again comes to the rescue, killing germs, arousing the glands to renewed work and hurrying the toxins off through the intestines. During the course of pneumonia, we sometimes have to repeat the calomel and reload.

In this connection, I wish to mention recent experiments with intravenous injections of mercurochrome only to condemn them. While it is called a scientific treatment, I do know it is attendant with a mortality of 75 per cent or more.

Other drugs used in the treatment of pneumonia in its initial stage are the heart depressants, aconite and veratrum. These two drugs and their application in the treatment of this disease should be restudied by the

medical profession. When skillfully used, no other drugs can take their place to circumscribe and lessen congestion of the lungs. Aconite acts beautifully with children, but I prefer veratrum with the stout and vigorous man and I give it to physiological effect. But be sure of a normal heart!

After having antisepticized the patient with calomel and the heart depressants have controlled the fast and hard beating heart, thus stopping the spread of congestion, then we leave off the depressants and begin another very important drug, the essayed tincture of digitalis, which is generally continued with proper doses to the end. We also add a more liberal diet, the best one being cold buttermilk every three or four hours in addition to orange juice, when beginning to feed. In severe terminals we may have to give strychnine and atropine pro-renata, also good diffusible stimulants. In the aged, and in weak children about to drown in excess of secretion, give strychnine and atropine hypodermically.

The above is an outline of my handling of pneumonia patients and for the last ten or twelve years, I cannot remember having written a death certificate for that disease. It may be called "good luck" for the doctor, but it was better luck for the patient. Don't be a skeptic in the use of potent drugs. Learn their physiological action and use them discreetly and skillfully.

Some of the colleges have been teaching the idea that pneumonia can not be combatted, and "only give the patient hygienic surroundings, good air, water, and liquid diet." In other words, expectant treatment. There was never a greater error. While it is admitted that most cases run a cycle of about seven days, yet taken in hand in the very early stages, a handsome per cent can be aborted. And of the remainder, 95 per cent can be ameliorated.

This outline of treatment, applicable to pneumonia, may not appeal to the veteran physician as being to him redundant, but younger professionals may glean from it something worthwhile.

WELCOME TO ATLANTA

Eighty-second annual session of the Association, Biltmore Hotel, May 13, 14, 15.

RUPTURE OF SPLEEN IN MALARIAL THERAPY IN SYPHILLIS

S. H. POLAYES and MAX LEDERER, Brooklyn (*Journal A. M. A.*, April 4, 1931), give abstracts of eight cases of rupture of the spleen in malarial therapy in syphilis reported in the literature and to these add a case that they observed. They state that spontaneous rupture of the spleen occurs much more frequently in cases of induced malaria for syphilis of the central nervous system than in naturally acquired malaria. The usual changes predisposing to rupture, namely, enlargement and softening, are not present in spleens of patients suffering from syphilis of the central nervous system prior to induction of malaria. The increase in fibrous tissue in the capsule and septums with resultant loss of elasticity that occurs in syphilis does, however, predispose to spontaneous rupture. The symptomatology of the complication is briefly described and the importance of its early recognition is emphasized. A plea is made for more careful choice of patients who are to receive malarial therapy to avoid the possible fatal complication—rupture of the spleen.

PNEUMONOCOCCIOSIS IN IRON MINERS

GEORGE B. LAWSON, W. P. JACKSON and J. E. GARDNER, Roanoke, Va. (*Journal A. M. A.*, April 4, 1931), emphasize that operators of air drills working four or five years in an atmosphere heavily laden with iron ore and silica dust may develop distressing symptoms of lung fibrosis after they have discontinued mining and have lived from four to eight years in apparently good physical and hygienic conditions. The fact that such operators at the time of their retirement from years of exposure to iron and silica dust have no symptoms may have but little bearing on the future progress of their disease. This form of lung fibrosis is not merely a cumulative action of dust but is a result, a stage of the disease which requires for its development a certain amount of time after the heavy inhalation of dust. This marked secondary fibrosis is comparatively rapid in its development.

IRON AND COPPER IN TREATMENT OF ANEMIA IN CHILDREN

As there is still some controversy in the literature as to the effects of iron in the treatment of anemia in children, it occurred to MILTON SMITH LEWIS, Nashville, Tenn. (*Journal A. M. A.*, April 4, 1931), that it was of considerable importance to determine whether the effect of iron could be enhanced by the addition of copper, and it was felt that a study of the therapeutic action of these two elements may help to demonstrate their value or lack of value as possible therapeutic agents in the treatment of anemia in children. It was found that iron and copper given in combination to thirty-four children with nutritional and secondary anemia was more effective than iron given alone. This was particularly noticeable in the nutritional series.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Association of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

APRIL, 1931

THE CRAWFORD W. LONG MEMORIAL PRIZE

The membership of the Medical Association of Georgia should feel very proud of the fact that a prize, a reward, is offered for superior scientific work by members of their association, given with the object of stimulating active efforts along the lines of original work in medicine. This has already interested a number of our medical men and they have presented their original work before our State Association and entered their essays in the contest. This is borne out by the fact that last year (1930 annual meeting, Augusta) twelve essays were submitted, the greatest number offered since the prize was first tendered. These represented one-third of all subjects (papers) on the official scientific program. Owing to the fact that our association is only one of a few that has the distinction of offering such a prize, it is felt that even greater interest should be manifested.

The prize is donated annually to our association through one of its members, by a man interested in the advancement of medicine. Appreciation of his generosity can be best exhibited by submitting a large number of papers in the contest.

The first contest for it was held in 1927, and the presentation of the prize was made at the annual meeting in Savannah in 1928.

The following rules govern the prize contest:

(1) The essayist must be a member in good standing in the Medical Association of Georgia.

(2) The essay must be presented at the regular annual convention of the Medical Association of Georgia, by the essayist himself, and at the time appointed by the program committee. Otherwise it will be disqualified.

(3) The essayist must specifically state that he is a contestant for the Crawford W. Long Memorial Prize for original work and

must indicate specifically in his essay what he claims to be original.

(4) The essay and essayists are subject to the rules and customs observed by the program committee, especially as to notifying that committee of your title and intention to read a paper, by expiration date fixed by them, and as to the time limit allowed in presenting paper. It is also understood that the essay will be published in the Journal of the Medical Association of Georgia. However, the committee will agree that it may be published elsewhere with minor changes.

(5) The essays must show original work.

(6) Essays must be of sufficient merit. Decision rests with the committee. If there be no essay of sufficient merit, the prize will not be presented.

(7) Within two months after the essay has been presented at the annual meeting of the Medical Association of Georgia five (5) copies of it are to be sent to the chairman of the Crawford W. Long Memorial Prize committee, in order that each member of the committee may study the essay at the same

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.

time and each independently render a decision.

(8) The decision of the committee will be reached after careful study and due consideration of the manuscripts of the several essays. This decision will be published in the Journal of the Medical Association of Georgia, at the discretion of the committee.

(9) The decision rendered by the committee is final.

As many men dislike to enter a contest because their names are often published, even when they do not win, the committee wishes to stress the point that it reveals only the names of the winners of the prize and of those whom it thinks are entitled to honorable mention because of the excellence of their efforts.

If your paper embodies any original

thought, you are invited to enter it in the contest. If not this year, do so next year.

WM. R. DANCY, M.D.,
Chairman, Crawford W. Long Memorial
Prize Committee.
Savannah, Ga., March 17, 1931.

THE CLASSIFICATION OF PULMONARY TUBERCULOSIS

Tuberculosis remains unconquered and is still a most important cause of death and disability. All over the United States well-organized agencies are fighting the spread of this malady with encouraging success. Every physician should help in the fight by correctly classifying his cases, keeping full records and reporting all cases to his state board of health.

The following classification is recommended by the National Tuberculosis Association and I urge you to study it and use it constantly:

LESION

I. Minimal Lesion: Slight lesion or lesions limited in total volume to that above the second chondrosternal junction and fifth thoracic vertebra of one side. No serious tuberculosis complications.

POSSIBLE SYMPTOMS

A. Slight or None: Slight or no constitutional symptoms including (particularly) gastric or intestinal disturbance or rapid loss of weight; slight or no elevation of temperature (not over 99.5 degrees F. after rest) or acceleration of pulse (not over 90 for men and 96 per minute for women after rest) at any time during the twenty-four hours. Expectoration usually small in amount or absent. Tubercle bacilli may be present or absent.

B. Moderate: No marked impairment of function, either local or constitutional.

C. Severe: Marked impairment of function, local or constitutional.

MODERATELY ADVANCED LESION

II. Moderately Advanced Lesion: A lesion of one or both lungs, more widely distributed than under minimal, the extent of which may vary, according to the severity of the disease, from the equivalent of one-third the volume of one lung (consolidation or marked infiltration) to the equivalent of the volume of an entire lung (infiltration) with or without evidence of cavity formation, cavities not to exceed in total diameters 2 c.m. No serious tuberculosis complications.

POSSIBLE SYMPTOMS

A. Symptoms Slight or None: (Same as A. above.)

B. Symptoms Moderate: (Same as B. above.)

C. Symptoms Severe: (Same as C. above.)

FAR ADVANCED LESION

III. Far Advanced Lesion: A lesion more extensive than under *moderately advanced*. Of definite evidence or marked cavity formation. Or serious tuberculous complications.

POSSIBLE SYMPTOMS

A. Symptoms Slight or None: (Same as A. above.)

B. Symptoms Moderate: (Same as B. above.)

C. Symptoms Severe: (Same as C. above.)

Under this scheme, the following classifications are possible:

Minimal, A; Moderately Advanced, B; Far Advanced, C.

Apparently Cured:

All constitutional symptoms and expectoration with bacilli absent for a period of two years under ordinary conditions of life.

Arrested:

All constitutional symptoms and expectoration with bacilli absent for a period of six months; the physical signs to be those of a healed lesion; roentgen findings to be compatible with the physical signs.

Apparently Arrested:

All constitutional symptoms and expectoration with bacilli absent for a period of three months; the physical signs to be those of a healed lesion; roentgen findings to be compatible with physical signs. to be those of a healed lesion; roentgen findings to be compatible with physical signs.

Quiescent:

Absence of all constitutional symptoms; expectoration and bacilli may or may not be present; physical signs and roentgen findings to be those of a stationary or retrogressive lesion; the foregoing conditions to have existed for at least two months.

Improved:

Constitutional symptoms lessened or entirely absent; cough and expectoration with bacilli usually present; physical signs and roentgen findings to be those of a stationary or retrogressive lesion.

Unimproved:

Essential symptoms unabated or increased; physical signs and roentgen findings to be those of an active or progressive lesion.

E. A. BANCKER, JR., M.D.

WINNER OF
THE CRAWFORD W. LONG
MEMORIAL PRIZE

The Crawford W. Long Memorial Prize Committee, having carefully reviewed and studied the several essays read at the 1930 annual meeting of the Medical Association of Georgia and tendered in competition for the Crawford W. Long Memorial Prize, submits herewith its report:

Twelve essays, all exhibiting a high type of work, were presented. This is the largest number which has at any time been entered in the contests. This number represented one-third of all essays read at the annual meeting of the State Association. The increased interest in this prize is evidently due to the fact that its existence and the conditions governing it are just becoming known, through publicity in *THE JOURNAL* and by the officers of the Association directing attention to it.

The winner of the prize in the 1930 contest was Dr. H. M. Tolleson, Hahira, who wrote an excellent essay on "The Treatment of Hemoglobinuric Fever—Case Report".

Your committee was very much gratified at the interest in the Crawford W. Long Prize essay contest in 1930 and trust that the 1931 contest will excite the same interest and enthusiasm.

DR. WM. R. DANCY, *Chairman.*

DR. V. P. SYDENSTRICKER.

DR. STEWART ROBERTS.

DR. R. V. LAMAR.

DR. GEORGE W. BACHMANN.

March 19, 1931.

OFFICIAL CALL

*To the Officers, Fellows, and Members of
the American Medical Association*

The eighty-second annual session of the American Medical Association will be held in Philadelphia, Pa., from Monday, June 8th, to Friday, June 12th, 1931.

The House of Delegates will convene on Monday, June 8th.

The Scientific Assembly of the Association will open with the General Meeting held on Tuesday, June 9th at 8:30 p.m.

The various sections of the Scientific Assembly will meet Wednesday, June 10th, at 9 a.m. and at 2 p.m. and subsequently according to their respective programs.

WILLIAM GERRY MORGAN,
President.

FREDERICK C. WARNSHUIS,
Speaker House of Delegates.

Attest: Olin West, Secretary.

Chicago, Ill., March 25th.

House of Delegates

The House of Delegates will convene at 10:00 a.m. on Monday, June 8, 1931, in the Crystal Ballroom of the Benjamin Franklin Hotel, Chestnut at Ninth street.

Representation

The apportionment of delegates made at the Minneapolis session of 1928 entitles your State association to three delegates for 1929-30-31.

"A member of the House of Delegates must have been a member of the American Medical Association and a Fellow of the Scientific Assembly for at least two years next preceding the session of the House of Delegates at which he is to serve."

"Delegates and alternates from constituent associations shall be elected for two years. Constituent associations entitled to more than one representative shall elect them so that one-half, as near as may be, shall be elected each year. Delegates and alternates elected by the sections, or delegates appointed from the United States Army, United States Navy and United States Public Health Service shall hold office for two years."—Chap. I, Secs. 1 and 2, By-Laws.

Rules for the Guidance of the Committee on

Credentials

Adopted by the House of Delegates at Atlantic City, N. J., June 6, 1912.

1. Credentials shall be of two parts. The first part shall be sent to the office of the Secretary of the American Medical Association by the secretary of the constituent association, not later than seven days prior to the first day of the first meeting of the House of Delegates, and shall be a list of delegates and alternates for that association. The constituent associations shall designate an alternate for each delegate, who may take the pledge of the delegate when authorized to do so by said delegate in writing. In the absence of such authority, any alternate who has been duly chosen by the constituent association may be seated in place of any delegate who is unable to attend, provided he presents proper official authority from said association. A certificate signed by the president or secretary of the constituent association shall be deemed legal authority (as amended June 7, 1921).

2. Each delegate shall be furnished with a credential by the secretary of the association by which he is elected on a prescribed form furnished by the secretary of the American Medical Association, which shall give the date and term for which he was elected and who was elected to act as alternate for him in case of his inability.

3. A delegate, on presenting himself to the Committee on Credentials, may be seated even though he may not present part 2 of his credentials, provided he is properly identified as the delegate who was elected by his association and whose name appears on the secretary's record.

4. No alternate may be seated unless his credentials meet the same requirements as designated for the delegate and he can show written evidence that he is empowered by his delegate to act for him, except as pro-

vided for in Section 1 as amended (as amended June 7, 1921).

Scientific Assembly

The opening general meeting, which constitutes the opening exercises of the Scientific Assembly of the Association, will be held Tuesday evening, June 9, 1931, at 8:30. The sections will meet on Wednesday, Thursday, and Friday, June 10, 11 and 12, 1931.

Convening at 9:00 a.m. the Sections on Practice of Medicine; Obstetrics, Gynecology, and Abdominal Surgery; Laryngology, Otolaryngology, and Rhinology; Pathology and Physiology; Orthopedic Surgery; Urology; Radiology; Preventive and Industrial Medicine and Public Health.

Convening at 2:00 p.m. the Sections on Surgery, General and Abdominal; Ophthalmology; Diseases of Children; Pharmacology and Therapeutics; Nervous and Mental Diseases; Dermatology and Syphilology; Gastro-Enterology and Proctology.

Registration Department

The registration department will be open from 8:30 a.m. until 5:30 p.m. on Monday, Tuesday, Wednesday, and Thursday, June 8, 9, 10, and 11, and from 8:30 a.m. to 12:00 noon on Friday, June 12, 1931.

FOREIGN COOPERATION IN CONNECTION WITH THE MEDICAL CLINIC TOUR

We have a truly wonderful list of men in Europe who are making all local arrangements in each place for the members of our party. The list is as follows:

London

A. McBeth Elliott, M.D., master of surgery.

Holland

Dr. Jan Shoemaker, of the Shoemaker Clinic in The Hague, assisted by Dr. W. H. Teupken.

Berlin

Dr. Max Boehm, Medical Adviser of the German government.

Leipzig

Dr. Wilhelm Lange, Director of the Nose and Ear Clinic of the University and of the new Pathologic Anatomical Institute.

Dresden

Dr. Rostoski and Dr. Bahrtdt, Professors in the University, and Chief Surgeons of the Municipal Hospital.

Prague

Professor Arnold Jirasek, Professor of Surgery in Karlova University.

Vienna

Hofrat Dr. Anton Eiselberg, and Hofrat Dr. Julius Wagner-Jauregg, Professors in the University of Vienna.

Munich

Professor Doctor Erich Lexer, director of the Institute of Clinical Surgery and Professor Doctor Friedrich Mueller of the Medical Faculty.

Zurich

Professor Doctor Otto Veraguth, Dean of the University.

Berne

Dr. Karl Wegelin, Dean of the Medical Faculty. A cordial welcome from Dr. F. de Quervain.

Paris

Dr. Henri Hartman, Professor of Surgery in the University of Paris, and President of the National Committee on the Development of Medical Connections.

* * *

I do not believe that this list could easily be improved upon. If it does not impress the doctors of the country I cannot imagine a list that would!

Radiological Congress

Also please point out that the week in Paris coincides with the meeting of the International Radiological Congress. President Dr. Beclere has expressed a genuine interest in having our members visit the congress. The congress will be comprised of six sections:

1. Radio physics.
2. Radio biology.
3. Radio diagnostics.
4. Radio therapy.
5. Radio electrolgy.
6. Natural and Artificial Heliotherapy.

An exhibit will also be organized in connection with the Congress. Members who desire to take part in the festivities and receptions organized for the occasion of the Congress should send their subscription in advance to the Secretary of the Congress, Dr. R. Ledoux-Lebard, 122 Rue de la Boetie, Paris (VIII). The subscription is 300 francs (\$12) for official members attending the Congress, and 50 francs (\$2) per person for those accompanying the members.

The following questions will be analyzed:

1. Radiologic examination of the alimentary canal.
2. Radiologic examination of the urinary tract with concrete illustrations.
3. Treatment of cancer.
4. Radiotherapy of inflammatory diseases.
5. Electrotherapy diathermic of inflammatory diseases.

In each case a conference of thirty minutes' duration will be held in the presence of the whole assembly and members of the Congress are cordially invited to bring forth the results of their personal experience on the different subjects involved.



Scottish Rite Hospital, Decatur

*SCOTTISH RITE HOSPITAL**Decatur*

The Scottish Rite Hospital for Crippled Children is doing a wonderful work among little sufferers whose parents are not able to pay for their treatment. The work begun here has served as a pattern for similar institutions constructed throughout the nation.

The Steiner Cancer Clinic represents a quarter of a million dollar gift to the city of Atlanta from the estate of Albert Steiner. The remainder of his estate is controlled by trustees who spend the income from about a half a million dollars on this hospital. It has thirty beds and an out-patient department. Has a large quantity of radium and several x-ray machines all devoted exclusively to the treatment of cancer and allied diseases. The only hospital of this kind in the Southeast and one of only ten or twelve on the North American continent. More than 6,500 cases of cancer have been treated here since the establishment of the clinic five years ago.

Government Hospital No. 48, located on Peachtree Road, cares for disabled veterans of the World War. It has a capacity of 203 beds.

In addition to these

specialty hospitals, Atlanta has twenty-three other sanatoriums, among which are the Georgia Baptist Hospital, St. Joseph's Infirmary, the Wesley Memorial Hospital, Eggleston Memorial Hospital, the Crawford W. Long Memorial Hospital and Clinic, Atlanta Hospital, Piedmont Hospital, Noble's Sanatorium, Blackman's Health Resort, Grady Hospital, and others.

RECREATION

Atlanta has five first-run picture shows, a stock company during the season, and several second-run and smaller neighborhood picture shows.

Sixty-six parks, totaling 1,800 acres, are embraced in Atlanta's Park System.

Atlanta has ten golf courses, three of which are eighteen holes, seven nine holes. Courses, all grass greens and playable all the year. Atlanta has attracted the attention of the country at large with her famous golf champions, in Bobby Jones, International Champion; Watts Gunn, National Intercollegiate Champion, and Miss Alexa Stirling, former National Woman

Golf Champion. There are fifty-nine tennis courts, twelve baseball fields, two basketball courts, and six swimming pools in the various parks and playgrounds.



ATLANTA CONVENTION BUREAU

Terminal Station, Atlanta

MEDICAL ASSOCIATION OF GEORGIA

EIGHTY-SECOND ANNUAL SESSION

ATLANTA—BILTMORE HOTEL, *Headquarters*

PROGRAM

MEDICAL ASSOCIATION OF GEORGIA

EIGHTY-SECOND ANNUAL SESSION

Atlanta

Biltmore Hotel, Headquarters

May 12, 13, 14, 15, 1931

Officers

President—G. Y. Moore, Cuthbert.

President-Elect—Arthur G. Fort, Atlanta.

First Vice President—George A. Traylor, Augusta.

Second Vice President—S. T. R. Revell, Louisville.

Secretary-Treasurer—Allen H. Bunce, Atlanta.

Parliamentarian—M. A. Clark, Macon.

Delegates to the A. M. A.

Wm. H. Myers (1931-2)..... Savannah

Alternate, Wm. A. Mulherin..... Augusta

E. C. Thrash (1931-2)..... Atlanta

Alternate, C. W. Roberts..... Atlanta

O. H. Weaver (1930-1)..... Macon

Alternate, C. K. Sharp..... Arlington

FULTON COUNTY MEDICAL SOCIETY

Officers

President—T. C. Davison, Atlanta.

President-Elect—Dan Y. Sage, Atlanta.

Vice President—William A. Smith, Atlanta.

Secretary-Treasurer—Howard Hailey, Atlanta.

COMMITTEES*

General Committee on Arrangements

Marion C. Pruitt, Atlanta, Chairman.

Edgar G. Ballenger, Atlanta.

James N. Brawner, Atlanta.

Charles E. Dowman, Atlanta.

Charles W. Roberts, Atlanta.

Edgar D. Shanks, Atlanta.

Theodore Toepel, Atlanta.

Charles E. Waits, Atlanta.

Reception

W. Perrin Nicolson, Atlanta, Chairman.

Walter E. Barber, Atlanta.

George W. Fuller, Atlanta.

Trimble C. Johnson, Atlanta.

Hal C. Miller, Atlanta.

Wilborn A. Upchurch, Atlanta.

Transportation

W. Frank Wells, Atlanta, Chairman.

Eustace A. Allen, Atlanta.

Mark S. Dougherty, Atlanta.

Murdock Eguen, Atlanta.

Archibald Smith, Atlanta.

Samuel Stampa, Atlanta.

Golf

James J. Clark, Atlanta, Chairman.

Luther H. Kelley, Atlanta.

Garnett W. Quillian, Atlanta.

Dan Y. Sage, Atlanta.

Trap Shooting

Herschel C. Crawford, Atlanta, Chairman.

Leo P. Daly, Atlanta.

John T. Floyd, Atlanta.

James H. Hodges, Hapeville.

Banquet and Entertainment

Hal M. Davison, Atlanta, Chairman.

Avary M. Dimmock, Atlanta.

Earl H. Floyd, Atlanta.

Edgar H. Greene, Atlanta.

Miller T. Harrison, Atlanta.

Floyd W. McRae, Atlanta.

Clinical

Benjamin H. Clifton, Atlanta, Chairman.

Carl C. Aven, Atlanta.

Henry R. Donaldson, Atlanta.

Warren S. Dorrough, Atlanta.

Oscar H. Matthews, Atlanta.

Joseph Yampolsky, Atlanta.

COUNCIL

Chairman..... M. M. Head, Zebulon

Clerk..... C. L. Ayers, Toccoa

Secretary..... Allen H. Bunce, Atlanta

First District..... Wm. H. Myers, Savannah

Vice-Councilor..... C. Thompson, Millen

Second District..... J. A. Redfearn, Albany

Vice-Councilor..... R. F. Wheat, Bainbridge

Third District..... J. C. Patterson, Cuthbert

Vice-Councilor..... Chas. A. Greer, Oglethorpe

Fourth District..... O. W. Roberts, Carrollton

Vice-Councilor..... W. H. Clark, LaGrange

Fifth District..... E. C. Thrash, Atlanta

Vice-Councilor..... W. A. Selman, Atlanta

Sixth District..... M. M. Head, Zebulon

Vice-Councilor..... K. S. Hunt, Griffin

Seventh District..... M. M. McCord, Rome

Vice-Councilor..... W. H. Perkinson, Marietta

Eighth District..... H. M. Fullilove, Athens

Vice-Councilor..... Paul L. Holliday, Athens

Ninth District..... C. L. Ayers, Toccoa

Vice-Councilor..... J. K. Burns, Jr., Gainesville

Tenth District..... S. J. Lewis, Augusta

Vice-Councilor..... H. D. Allen, Jr., Milledgeville

Eleventh District..... A. S. M. Coleman, Douglas

Vice-Councilor..... K. McCullough, Waycross

Twelfth District..... J. Cox Wall, Eastman

Vice-Councilor..... J. W. Edmondson, Dublin

COMMITTEES

Scientific Work

C. W. Roberts, Atlanta, Chairman.

Sam P. Wise, Americus.

*Committees appointed to serve before and during the annual session of the Association to be held at the Biltmore Hotel, Atlanta, May 12, 13, 14, 15.

G. Y. Moore, Cuthbert, President.
 A. G. Fort, Atlanta, President-Elect.
 A. H. Bunce, Atlanta, Secretary-Treasurer.

Public Policy and Legislation

J. W. Palmer, Ailey, Chairman (1932).
 Dan Y. Sage, Atlanta (1931).
 A. R. Rozar, Macon (1933).
 V. H. Bassett, Savannah (1931).
 G. Y. Moore, Atlanta, President.
 A. G. Fort, Atlanta, President-Elect.
 A. H. Bunce, Atlanta, Secretary-Treasurer.
 T. F. Abercrombie, Atlanta, Commissioner of
 Health, State of Georgia.

Medical Defense

M. A. Clark, Macon, Chairman (1933).
 William A. Mulherin, Augusta (1934).
 E. C. Thrash, Atlanta (1931).
 M. M. Head, Zebulon, Chairman of Council.
 A. G. Fort, Atlanta, President-Elect.
 A. H. Bunce, Atlanta, Secretary-Treasurer.

Hospitals

C. S. Lentz, Augusta, Chairman (1933).
 Grady N. Coker, Canton, Secretary (1932).
 K. McCullough, Waycross (1934).
 George F. Klugh, Atlanta (1935).
 Julian K. Quattlebaum, Savannah (1931).
 A. G. Fort, Atlanta, President-Elect.

Abner Wellborn Calhoun Lectureship

J. E. Paullin, Atlanta, Chairman (1933).
 H. I. Reynolds, Athens (1934).
 Eugene E. Murphey, Augusta (1935).
 Craig Barrow, Savannah (1931).
 Frank K. Boland, Atlanta (1932).
 A. G. Fort, Atlanta, President-Elect.

Necrology

M. Hines Roberts, Atlanta, Chairman.
 C. K. Sharp, Arlington.
 H. M. Branham, Brunswick.

Medical History of Georgia

E. C. Thrash, Atlanta, Chairman.
 Frank K. Boland, Atlanta.
 M. A. Clark, Macon.
 G. Y. Moore, Cuthbert, President.
 A. G. Fort, Atlanta, President-Elect.
 A. H. Bunce, Atlanta, Secretary-Treasurer.

Crawford W. Long Memorial Prize

William R. Dancy, Savannah, Chairman.
 Stewart R. Roberts, Atlanta.
 V. P. Sydenstricker, Augusta.
 George Bachmann, Atlanta.
 R. V. Lamar, Augusta.

Cancer Commission

J. L. Campbell, Atlanta, Chairman.
 G. H. Lang, Savannah.
 Charles H. Watt, Thomasville.
 J. C. Patterson, Cuthbert.
 A. A. Barge, Newnan.
 H. G. Weaver, Macon.

R. M. Harbin, Rome.
 Stewart D. Brown, Royston.
 M. B. Allen, Hoschton.
 W. J. Cranston, Augusta.
 J. W. Simmons, Brunswick.
 J. W. Edmondson, Dublin.
 E. L. Bishop, Atlanta.

Advisory Committee—Woman's Auxiliary

B. H. Minchew, Waycross, Chairman.
 Marion T. Benson, Atlanta.
 V. C. Daves, Vienna.
 William R. Dancy, Savannah.
 Paul L. Holliday, Athens.

Fraternal Delegates to Other State Meetings

To visit Alabama: J. Cox Wall, Eastman; James
 A. Fountain, Macon.

To visit Florida: Gordon Chason, Bainbridge; W. F.
 Reavis, Waycross.

To visit North Carolina: R. L. Miller, Waynes-
 boro; S. A. Boland, Jefferson.

To visit South Carolina: Stewart R. Roberts, At-
 lanta; A. G. Fort, Atlanta.

To visit Tennessee: M. M. McCord, Rome; Joe P.
 Bowdoin, Adairsville.

DELEGATES TO THE 1931 SESSION*

Baldwin	-----
Barrow	-----
Bartow	----- W. E. Wofford, Cartersville
Ben Hill	----- G. W. Willis, Ocilla
Bibb	----- C. L. Ridley, Macon
-----	----- Jas. A. Fountain, Macon
Blue Ridge	----- J. M. Daves, Blue Ridge
Brooks	-----
Bulloch-Candler-Evans	----- A. J. Mooney, Statesboro
Burke	----- H. A. Macauley, Waynesboro
Butts	-----
Campbell	-----
Carroll	-----
Chatham	----- R. V. Martin, Savannah
-----	----- G. H. Lang, Savannah
Chattooga	-----
Cherokee	----- J. P. Turk, Nelson
Clarke	----- John A. Hunnicutt, Athens
Clayton-Fayette	-----
Cobb	----- W. M. Gober, Marietta
Colquitt	----- J. E. Lanier, Moultrie
Coffee	----- J. W. Wallace, Douglas
Cook	-----
Coweta	-----
Crisp	----- Chas. Adams, Cordele
Decatur-Seminole	-----
DeKalb	-----
Dooley	----- E. B. Davis, Byromville
Dougherty	----- I. W. Irvin, Albany
Douglas	-----
Elbert	----- J. E. Johnson, Elberton
Emanuel	----- D. D. Smith, Waynesboro
Floyd	-----

*This list includes the names of all delegates which have been reported to the Secretary-Treasurer. Others will be included in the official program, if reported at once.

Forsyth	
Franklin	
Fulton	C. C. Aven, Atlanta
	M. T. Benson, Atlanta
	T. C. Davison, Atlanta
	Howard Hailey, Atlanta
	M. C. Pruitt, Atlanta
	Dan Y. Sage, Atlanta
	W. F. Wells, Atlanta
Glynn	Robert S. Burford, Brunswick
Gordon	
Grady	J. V. Rogers, Cairo
Greene	
Gwinnett	
Habersham	E. H. Lamb, Cornelia
Hall	B. B. Davis, Gainesville
Hancock	E. H. Hutchings, Sparta
Haralson	
Hart	
Henry	J. G. Smith, McDonough
Houston-Peach	
Jackson	L. C. Allen, Hoschtou
Jasper	
Jefferson	S. T. R. Revell, Louisville
Jenkins	Q. A. Mulkey, Millen
Johnson	
Jones	
Lamar	
Laurens	
Lowndes	T. C. Williams, Valdosta
Macon	T. M. Adams, Montezuma
Madison	C. H. Bryant, Comer
Meriwether	
Mitchell	
Monroe	
Montgomery	
Morgan	
Muscogee	
Newton	
Ocmulgee	J. M. Smith, Cochran
Polk	
Putnam	
Rabun	
Randolph	F. S. Rogers, Cuthbert
Richmond	L. P. Holmes, Augusta
	W. R. Houston, Augusta
Screven	
Spalding	A. H. Frye, Griffin
Stephens	
Stewart-Webster	
Sumter	J. C. Logan, Plains
Talbot	
Taliaferro	
Tattnall	
Taylor	
Telfair	Thomas J. McMillan, Milan
Thomas	C. H. Watt, Thomasville
Toombs	
Tri-Calhoun, Early, Miller	J. G. Standifer, Blakely
Troup	M. M. Byrd, West Point
Turner	
Upson	

Walker	H. F. Shields, Chickamauga
Walton	
Ware	J. E. Penland, Waycross
Warren	F. L. Ware, Warrenton
Washington	E. S. Peacock, Harrison
Wayne	
Whitfield	B. L. Kennedy, Dalton
Wilcox	
Wilkes	
Worth	

ANNOUNCEMENTS

Meetings will be held in the Ballroom of the Biltmore Hotel, except Surgical Clinics and Section on Surgery, which will be held in the Pompeian Room of the Biltmore Hotel, Wednesday and Thursday afternoons, May 13th and 14th.

Be sure to go to the Registration Desk, present your 1931 card and procure a badge immediately upon your arrival.

Discussion of papers is open to all members and guests of the Association. It is not limited to those named on the program.

On arising to discuss a paper the speaker will please announce his name and address clearly for the benefit of the Association stenographer.

Meetings will be called to order at the hour fixed on the program. It is especially desired that the members be prompt in their attendance.

All manuscripts should be typewritten, double spaced and on one side of the paper only. Papers must be handed to the Secretary immediately after being read.

IMPORTANT NOTICE

Delegates must present written credentials to the Committee on Credentials from the House of Delegates to secure delegates' badge.

PUBLIC MEETINGS

WEDNESDAY, MAY 13, 10:00 A.M.

Opening Meeting

WEDNESDAY, MAY 13, 8:00 P.M.

This meeting has been arranged for the public and will be held in the Ballroom of the Biltmore Hotel. It will be of special interest to the physicians and their wives.

Presentation of the "Badge of Service" to the President, G. Y. Moore, by J. C. Patterson, Cuthbert.

THURSDAY, MAY 14, 12:00 NOON

President's Address

The President's address will be at an open session to which the public and visitors are invited.

ENTERTAINMENTS

WEDNESDAY, MAY 13, 12:30 TO 2:00 P.M.

Annual dinner of the alumni of the University of Georgia Medical Department, Biltmore Hotel.

Annual dinner of the alumni of the Emory University School of Medicine, Biltmore Hotel.

Get tickets at registration desk.

WEDNESDAY, MAY 13, 5:00 P.M.

The Phi Rho Sigma Medical Fraternity will give a tea for the visiting members at the Biltmore Hotel.

THURSDAY, MAY 14

7:00 to 10:00 P. M.

Banquet at Biltmore Hotel. T. C. Davison, Toast-master.

Presentation of the Crawford W. Long Memorial Prize to H. M. Tolleson, Hahira, by William R. Dancy, Savannah, Chairman.

10:00 to 12:00 P.M.

Dance at Biltmore Hotel.

GOLF COURSES

The golf courses at Ansley Park, Druid Hills, East Lake, Brookhaven, Capitol City Country Club, and Ingleside Country Club will be open to members of the Association on Tuesday, Wednesday and Thursday, May 12, 13, and 14.

TRAP SHOOTING

Trap shooting at the Peachtree Gun Club on Thursday, May 14, at 1:00 P.M. Scores will be kept for all participants and suitable prizes given.

MEETING OF THE COUNCIL

The first meeting of the Council will be held in the Ballroom of the Biltmore Hotel, May 12, at 6:00 P.M. Each Councilor will render a written report of conditions in each county in his district. Other meetings of the Council will be held on the call of the chairman.

MEETING OF THE HOUSE OF DELEGATES

Ballroom, Biltmore Hotel

TUESDAY, MAY 12, 2:30 P.M.

First meeting of the House of Delegates.

1. Call to order by the president.
2. Roll call.
3. Appointment of Reference Committee.
4. Report of officers:
 - President.
 - President-Elect.
 - Vice Presidents
 - Parliamentarian.
 - Secretary-Treasurer.
5. Report of Council by the chairman.
6. Report of committees:
 - a. Scientific Work.
 - b. Public Policy and Legislation.
 - c. Arrangements.
 - d. Medical Defense.
 - e. Hospitals.
 - f. Georgia State Nurses' Association.

g. Necrology.

h. Cancer Commission.

i. History.

j. Abner Wellborn Calhoun Lectureship.

k. Crawford W. Long Memorial Prize.

l. Advisory Committee—Woman's Auxiliary.

m. Special Committees.

7. Report of Delegates to the A. M. A.
8. Report of Fraternal Delegates.
9. Unfinished business.
10. New business.

THURSDAY, MAY 14, 8:00 A.M.

Second meeting of the House of Delegates.

1. Call to order by the President.
2. Reading of minutes.
3. Report of committees.
4. Unfinished business.
5. New business.

PROGRAM

The papers for each meeting must be read as scheduled on the program.

WEDNESDAY, MAY 13, 1931

Ballroom, Biltmore Hotel

10:00 A.M.

Call to order by the President, G. Y. Moore, Cuthbert.

INVOCATION

Marion McHenry HullAtlanta

ADDRESS OF WELCOME

George McCallum NilesAtlanta

RESPONSE TO ADDRESS OF WELCOME

Wm. H. MyersSavannah

SCIENTIFIC PAPERS

1. Etiology of Mental Diseases
George L. Echols, Milledgeville.
To lead the discussion:
Roger C. Swint, Milledgeville.
Henry D. Allen, Jr., Milledgeville.
2. Legalized Surgical Prevention of Reproduction in the Unfit
E. C. Thrash, Atlanta.
To lead the discussion:
James N. Brawner, Atlanta.
William R. Dancy, Savannah.
3. Appendicitis in Elderly Patients
William S. Goldsmith, Atlanta.
To lead the discussion:
Charles C. Harrold, Macon.
Grady N. Coker, Canton.
4. A Discussion of Hypertension
Steve P. Kenyon, Dawson.
To lead the discussion:
Stewart R. Roberts, Atlanta.
J. A. Redfearn, Albany.

5. Neurological Symptoms in Pernicious Anemia
William A. Smith, Atlanta.
To lead the discussion:
William C. Pumpelly, Macon.
R. H. Oppenheimer, Emory University.

Abner Wellborn Calhoun Lecture
COMMON ERRORS IN THE TREATMENT OF
HEART DISEASE

James Bryan Herrick, Chicago
Emeritus Professor of Rush Medical College University
of Chicago, Chicago.

WEDNESDAY, MAY 13, 2:30 P.M.

Medical Clinics
Ballroom, Biltmore Hotel

1. X-Radiation as an Aid in Treatment of Menopausal Disturbances
James J. Clark, Atlanta.
2. The Clinical Value of the Schilling Blood Count
Roy R. Kracke, Emory University.
3. Treatment of Pneumonia
Cyrus W. Strickler, Atlanta.
4. Diseases of the Chest
C. C. Aven, Atlanta.
5. Clinical Use and Value of the Electrocardiograph—
Case Reports with Illustrations
H. Cliff Sauls, Atlanta.
Carter Smith, Atlanta.
6. Dermatology
Howard Hailey, Atlanta.
7. Encephalitis
Lewis M. Gaines, Atlanta.

Surgical Clinics

Pompeian Room, Biltmore Hotel

1. Hallux Valgus
Michael Hoke, Atlanta.
2. Sacro-Iliac Joint Fusion—Case Reports
Lawson Thornton, Atlanta.
3. Bone and Joint Tuberculosis in Children
Theodore Toepel, Atlanta.
4. The Treatment of Pulmonary Tuberculosis by
Surgical Collapse
Frank K. Boland, Atlanta.
5. Neuro-Surgical Clinic
Charles E. Dowman, Atlanta.
Ed F. Fincher, Jr., Atlanta.
6. The Treatment of Acute Empyema by the Closed
Method—Illustrations
D. Henry Poer, Atlanta.
7. Some Problems in Handling the Fractured Femur—
Illustrated with Moving Pictures

Thomas P. Goodwyn, Atlanta.
H. D. Jernigan, Atlanta.

WEDNESDAY, MAY 13, 8:00 P.M.
Ballroom, Biltmore Hotel

Public Meeting

Presentation of the "Badge of Service" to the President, G. Y. Moore, Cuthbert, by J. C. Patterson, Cuthbert.

HOW TO LIVE A TIME LONGER

Charles M. Rosser
Dallas, Texas
Professor of Clinical Surgery
Baylor University College of Medicine, Dallas, Texas

PUBLIC ADDRESS

William Gerry Morgan
Washington, D. C.
Professor of Gastro-Enterology
Georgetown University School of Medicine
Washington, D. C.
President of the American Medical Association

THURSDAY, MAY 14, 8:30 A.M.

Ballroom, Biltmore Hotel

1. Foreign Bodies of the Respiratory Tract
Julian H. Buff, Atlanta.
To lead the discussion:
Claude L. Penington, Macon.
Murdock Equen, Atlanta.
2. Organized or Group Medicine
Montague L. Boyd, Atlanta.
To lead the discussion:
R. Hugh Wood, Atlanta.
Chas. H. Ferguson, Thomasville.
3. Cancer of the Stomach
Julian K. Quattelbaum, Savannah.
To lead the discussion:
Cleveland Thompson, Millen.
William L. Cooke, Columbus.
4. The Management of Menopause
Jackson W. Landham, Atlanta.
To lead the discussion:
James K. Fancher, Atlanta.
J. E. Johnson, Elberton.
5. Recent Advances in the Prevention and Treatment
of Disease of Children
Joseph Yampolsky, Atlanta.
To lead the discussion:
William A. Mulherin, Augusta.
M. M. McCord, Rome.
6. Integrating the Services of Public Health Agencies
and Private Practitioners in the Control of
Tuberculosis.
M. F. Haygood, Alto.

To lead the discussion:
 Champ H. Holmes, Atlanta.
 Hal M. Davison, Atlanta.

THURSDAY, MAY 14, NOON

Ballroom, Biltmore Hotel

President's Address

PUSHING BACK THE FRONTIERS

G. Y. Moore, Cuthbert

THURSDAY, MAY 14, 2:30 P.M.

Medical Section

Ballroom, Biltmore Hotel

1. The Result of Ten Years' Work on Rural Sanitation

Neal Kitchens, Warm Springs.

To lead the discussion:

M. A. Fort, Bainbridge.

T. F. Abercrombie, Atlanta.

2. The Treatment of Cancer with Tubercular Serum

J. M. Hull, Augusta.

To lead the discussion:

Edgar R. Pund, Augusta.

J. L. Campbell, Atlanta.

3. Agranulocytic Angina

W. W. Chrisman, Macon.

Charles C. Hinton, Macon.

To lead the discussion:

Rufus T. Dorsey, Atlanta.

William L. McDougall, Atlanta.

4. Progress in Psychiatry

Newdigate M. Owensby, Atlanta.

To lead the discussion:

N. P. Walker, Milledgeville.

Y. H. Yarbrough, Milledgeville.

5. Bacteriological Facts and Fancies

Lee Howard, Savannah.

To lead the discussion:

John Funke, Atlanta.

Ralston Lattimore, Savannah.

6. Diagnosis of Abdominal Tumors

Jas. E. Paullin, Atlanta.

To lead the discussion:

Jack C. Norris, Decatur.

Lee Howard, Savannah.

7. Tularemia Studies in Georgia

Joseph C. Massee, Atlanta.

To lead the discussion:

Guy O. Whelchel, Athens.

Walter C. Goodpasture, Atlanta.

SURGICAL SECTION

Pompeian Room, Biltmore Hotel

1. Unexpected Post-Operative Infections

R. M. Harbin, Rome.

To lead the discussion:

Ben H. Clifton, Atlanta.

J. C. Patterson, Cuthbert.

2. Caesarean Section Under Local and Spinal Anesthesia

T. C. Davison, Atlanta.

Edgar Boling, Atlanta.

To lead the discussion:

R. A. Bartholomew, Atlanta.

George Y. Massenburg, Macon.

3. Fibromatous Tumors of the Mesentery—

Case Report: Moving Pictures

Arthur D. Little, Thomasville.

To lead the discussion:

Wm. M. Folkes, Waycross.

Olin S. Cofer, Atlanta.

4. Ureteral Transplant for Exstrophy of Bladder—

Case Report

B. T. Wise, Americus.

To lead the discussion:

W. A. Selman, Atlanta.

W. W. Battey, Augusta.

5. The Treatment of Congenital Club Feet—

Illustrated with Moving Pictures:

J. H. Kite, Decatur.

To lead the discussion:

John D. Blackburn, Atlanta.

Henry M. Michel, Augusta.

6. Metastatic Pulmonary Carcinoma

R. C. Pendergrass, Americus.

To lead the discussion:

Lila M. Bonner, Atlanta.

Rupert H. Fike, Atlanta.

7. An Atavistic Human Foot

George A. Williams, Atlanta

To lead the discussion:

L. Minor Blackford, Atlanta.

V. P. Sydenstricker, Augusta.

FRIDAY, MAY 15, 8:30 A.M.

Ballroom, Biltmore Hotel

Symposium on Urology

Papers 1, 2 and 3

1. The Advantages and Disadvantages of Uroselectan in Urological Diagnosis—Lantern Slides

E. G. Ballenger, Atlanta.

O. F. Elder, Atlanta.

Harold F. McDonald, Atlanta.

2. The Significance of Pus in the Urine

W. A. Upchurch, Atlanta.

3. The Treatment of Syphilis

W. B. Emery, Atlanta.

To lead the discussion on papers 1, 2, and 3:

Earl H. Floyd, Atlanta.

John C. Keaton, Albany.

William F. Reavis, Waycross.

Stephen T. Brown, Atlanta.

4. Some Observations on Spinal Anesthesia

C. H. Richardson, Jr., Macon.

To lead the discussion:
George Fuller, Atlanta.
C. H. Watt, Thomasville.

5. Should Doctors of Medicine Inject Business into Their Profession or Should They Forget the Business Side of Life?

S. P. Holland, Blakely.
To lead the discussion:
J. O. Elrod, Forsyth.
E. C. McCurdy, Shellman.

6. Trichomonas Vaginalis Vaginitis—A Common Cause of Leucorrhea
Walter R. Holmes, Atlanta.

To lead the discussion:
O. H. Weaver, Macon.
William F. Shallenberger, Atlanta.

7. Etiology and New Method of Surgical Treatment for Pruritus-Ani; Lantern Slides
Marion C. Pruitt, Atlanta.

To lead the discussion:
William H. Myers, Savannah.
Beecher DuVall, Atlanta.

ELECTION OF OFFICERS

President-Elect.
First Vice President.
Second Vice President.
Parliamentarian.
One Delegate to the A. M. A.
One Alternate Delegate to the A. M. A.
Councilors for the Fifth, Sixth, Seventh and Eighth Districts.
Selection of meeting place for 1932.

CONSTITUTION AND BY-LAWS

Chapter II, Section 2. No papers or addresses before the Association, except those of the President and invited essayists, shall occupy more than fifteen minutes in their delivery; and no member shall speak longer than five minutes, nor more than once on any subject, provided that each essayist shall have five minutes in which to close the discussion of his paper.

Chapter VIII, Section 1. The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

Chapter VIII, Section 2. All papers read before the Association shall become its property. Each paper shall be deposited with the Secretary when read, and if this is not done, it shall not be published.

No miscellaneous or business matters will be discussed before the scientific session, but will be referred to the House of Delegates.

Resolution Adopted 1921

Resolved, That a member who sends in a title of a paper to be placed on the program and is not present to read the paper shall pay the penalty of not having an opportunity to appear on the program for two

years, unless he presents an excuse acceptable to the Committee on Scientific Work.

C. W. ROBERTS, Chairman.
SAM P. WISE,
G. Y. MOORE, President.
A. G. FORT, President-Elect.
A. H. BUNCE, Secretary-Treasurer,
Committee on Scientific Work.

We are instructed by the President to announce to all essayists that the sessions of the Scientific Program of the Association will begin on time, and that the above regulations of the By-Laws in reference to the program will be strictly enforced.

IN MEMORIAM*

Anderson, Jesse Monroe, Columbus, October 12, 1930.

Ansley, Wiley S., Decatur, December 4, 1930.

Bates, Jack M., Canton, June 26, 1930.

Davis, Edward Campbell, Atlanta, March 11, 1931.

Dunwody, John A., Brunswick, November 27, 1930.

Ellis, James Nimmo, Atlanta, February 11, 1931.

England, William G., Cedartown, March 26, 1931.

Gibbs, Edward Thomas, Gainesville, July 2, 1930.

Jones, William Torrance, Atlanta, March 18, 1931.

Loden, George Luther, Colbert, February 13, 1931.

Macaulay, Hugh Angus, Waynesboro, February 4, 1931.

Mallicoat, Lester A., Trion, December 2, 1930.

McCurdy, W. F., Weston, February 6, 1931.

Monford, Henry Luther, Dublin, January 5, 1931.

Patterson, Frederick D., Cuthbert, December 31, 1930.

Randle, John H., Covington, November 5, 1930.

Smith, William Jackson, DeSoto, November 8, 1930.

Stapler, Maury Munnerlyn, Macon, December 19, 1930.

Suggs, Clarence Eugene, Barnesville, April 15, 1931.

Summerlin, James A., Pelham, October 7, 1930.

Wahl, Frederick, Savannah, June 28, 1930.

Ward, James A., Cordele, January 10, 1931.

Watts, James C., Rome, February 3, 1931.

Yankey, Worth Edwin, Atlanta, January 10, 1931.

*This is the list of members who have died since our last annual session as it appears on our records. Please notify the Secretary-Treasurer of any errors or omissions.

A very cordial invitation is extended to all members of the Association to attend the eighty-second annual session at the Biltmore Hotel, Atlanta, May 13, 14, 15. The Committee on Scientific Work has used every available means to arrange an interesting scientific program for the general practitioner as well as for those who may limit their practice. If you attend the opening meeting, it is very likely that you will be delighted to attend and participate in all succeeding meetings. We want you to attend the meetings, bring your wives, and hope that this will be one of your pleasant remembrances during your career.

CONSTITUTION AND BY-LAWS OF THE MEDICAL ASSOCIATION OF GEORGIA

Constitution

ARTICLE I.—NAME OF THE ASSOCIATION.

The name and title of this organization shall be the Medical Association of Georgia.

ARTICLE II.—PURPOSES OF THE ASSOCIATION

The purpose of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Georgia; to extend medical knowledge and advance medical science; to elevate the standard of medical education and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state and medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES

Competent societies shall consist of those county societies which hold charters from this Association.

ARTICLE IV.—COMPOSITION OF THE ASSOCIATION

Section 1. This Association shall consist of members and delegates.

Sec. 2. Members: The members of this Association shall be the members of the component county medical societies to which only white physicians shall be eligible.

Sec. 3. Delegates: Delegates shall be those members who are elected in accordance with this constitution and by-laws to represent their respective component societies in the House of Delegates of this Association.

ARTICLE V.—HOUSE OF DELEGATES

The House of Delegates shall be the legislative body of the Association, and shall consist of: (1) delegates elected by the component county societies; (2) the officers of the Association enumerated in Section I of Article IX of the Constitution; (3) ex-presidents and delegates to the American Medical Association.

ARTICLE VI.—COUNCIL

The Council shall be the Board of Trustees and Finance Committee of the Association. The Council shall have full authority and power of the House of Delegates between annual sessions, unless the House of Delegates be called into session as provided in the Constitution and By-Laws.

It shall consist of the Councilors, the President, the President-Elect and the Secretary-Treasurer of the Association. Five of its members shall constitute a quorum.

ARTICLE VII.—SESSIONS AND MEETINGS

Section 1. The annual sessions shall take place on the second Wednesday in May at such place as shall be designated by the Association, provided that in case of conflict with the meeting of the American Medical Association the Council may change the date by publishing a notice in the Journal of the Medical Association of Georgia three months before the session.

Sec. 2. Special meetings of either the Association or the House of Delegates may be called by a two-thirds vote of the Council, or upon the petition of twenty delegates.

ARTICLE VIII.—SECTIONS AND DISTRICT SOCIETIES

Section 1. The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections, and for the organization of such Councilor district societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE IX.—OFFICERS

Section 1. The officers of this Association shall be a President, President-Elect, two Vice-Presidents, a Secretary-Treasurer, a Parliamentarian, and twelve Councilors, one from each congressional district of the state.

Sec. 2. The officers, except the Secretary-Treasurer, Parliamentarian and Councilors, shall be elected annually, provided that after the annual meeting of 1928 a President-Elect and not a President shall be elected annually. The President-Elect shall assume his office as President immediately after the next annual meeting following his election. The terms of the Councilors shall be for three years, as may be arranged, viz: the councilors from the first, second, third and fourth districts for three years; those for the fifth, sixth, seventh and eighth districts for two years; those for the ninth, tenth and eleventh districts for one year (1905); councilor from the twelfth district to be elected with the ninth, tenth and eleventh for the full term of three years. The secretary-treasurer shall be elected for a term of five years, and the parliamentarian for a term of three years. All these officers shall serve until their successors are elected and installed.

Sec. 3. The officers of this Association shall be elected by ballot, and without nomination, at 12 o'clock noon, on the third day of the annual session. The Councilors shall be elected at the same time, but on nomination by their respective District Societies at the annual meeting of such Societies preceding the

meeting of the Association at which the vacancy occurs. If there is no election on the first ballot, the three names receiving the highest number of ballots shall be voted on, the other names being dropped. If there is no election on the second ballot, the two names receiving the highest number of ballots shall be voted on until an election occurs. Delegates to the American Medical Association shall be elected at the same time and in the same manner.

ARTICLE X.—FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall not exceed the sum of \$10.00 per capita per annum. Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publications, and for such other purposes as will promote the welfare of the profession. All resolutions appropriating funds must be approved by the Finance Committee before action is taken thereon. (Amended, May, 1929, page 482.)

ARTICLE XI.—RATIFICATION

The House of Delegates shall submit all questions before it to the Association for ratification.

ARTICLE XII.—THE SEAL

The Association shall have a common seal, with power to break, change or renew the same at pleasure.

ARTICLE XIII.—AMENDMENTS

Any amendment that may be offered to the Constitution shall lie over until the next annual session; and for its adoption at such session shall require a two-thirds vote of all present and voting.

By-Laws

CHAPTER I.—MEMBERSHIP

Section 1. The name of a physician on the properly certified roster of members of a component society, which has paid its annual assessment, shall be *prima facie* evidence of membership in this Association.

Sec. 2. Any person who is under sentence of suspension or expulsion from a component society or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

Sec. 3. Each member in attendance at the annual session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section.

Sec. 4. Any member for old age, length of service, or other good reasons, may upon recommendation of the Board of Censors, be elected to honorary membership of his county society without dues. Such member shall be enrolled as an honorary member of his county society and the Association, and shall be entitled to all the privileges of the Association.

CHAPTER II.—GENERAL MEETINGS

Sec. 1. All registered members may attend and participate in the proceedings and discussions of the general meetings. Visitors duly accredited to represent the Association of other states, or of the District of Columbia, not exceeding two in number for each organization, may attend upon, and participate in the discussion of the general meetings, but shall not have a vote. Such delegates may read papers upon invitation of the Committee on Scientific Work. The general meetings shall be presided over by the President or by one of the Vice-Presidents.

Sec. 2. No papers or addresses before the Association, except those of the President and invited essayists, shall occupy more than fifteen minutes in their delivery; and no member shall speak longer than five minutes, nor more than once on any subject, provided that each essayist shall have five minutes in which to close the discussion of his paper.

Sec. 3. Entertainments. Any social entertainment which may be given by this Association shall be confined to the evening of the second day.

Sec. 4. Guests. Any physician not a resident of this state but a member of his state association, or any distinguished scientist not a physician, may be counted a guest during any annual session on invitation of the President, and shall be accorded the privilege of participating in the scientific work of that session.

CHAPTER III.—HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet on the day preceding the first day of the annual session, the time to be fixed by the Committee on Scientific Work. It may adjourn from time to time as may be necessary to complete its business; provided that its hours shall conflict as little as possible with the general meetings. The order of business shall be arranged as a separate section of the program.

Sec. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members, and one for each fraction thereof, but each component society which has made its annual report and paid its assessment as provided in this Constitution and By-Laws shall be entitled to one delegate. Should the regular delegate from any county not be present at the meeting, the President shall appoint a substitute from that county to act.

Sec. 3. Twenty delegates present shall constitute a quorum.

Sec. 4. It shall through its officers, council and otherwise, give diligent attention to and foster the

scientific work and spirit of the Association, and shall constantly study and strive to make each annual session a stepping-stone to future ones of higher interest.

Sec. 5. It shall consider and advise as to the material interest of the profession, and of the public in those important matters wherein it is dependent on the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

Sec. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interests in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until if possible every physician in every county of the State has been brought under medical society influence.

Sec. 7. It shall encourage post-graduate and research work as well as home study, and shall endeavor to have the results utilized, and intelligently discussed in the county societies.

Sec. 8. It shall divide the State into councilor districts, one for each congressional district, and when the best interests of the Association and profession will be promoted thereby, organize in each a district medical society, and all members of component county societies and no others shall be members in such district societies.

Sec. 9. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates and may be present and participate in the debate thereon.

CHAPTER IV.—DUTIES OF OFFICERS

Section 1. The President shall preside at all meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and as far as practicable, shall visit, by appointment, the various sections of the State and assist the Councilors in building up the county societies, and in making their work more practical and useful.

Sec. 2. The Vice-President shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Vice-Presidents, in their order, shall succeed him.

In order to give him a better opportunity of becoming better acquainted with his duties and with the needs of the Association, the President shall be elect-

ed one year prior to taking office. During this time he shall be known as President-Elect and shall be ex officio member of the standing committees, and shall make recommendations at the next annual session. (Amended, May, 1930.)

Sec. 3. The Secretary-Treasurer shall give bond in the sum of One Thousand Dollars. He shall demand and receive all funds due the Association, together with the bequests and donations.

Sec. 4. The Secretary-Treasurer shall attend the general meetings of the Association and the meetings of the House of Delegates, and shall keep the minutes of their respective proceedings in separate record books. He shall be ex-officio Secretary of the Council. He shall be custodian of all record-books and papers belonging to the Association. He shall provide for the registration of the members, delegates and accredited visitors at the annual session. He shall with the co-operation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and on request transmit a copy of this list to the American Medical Association. He shall aid the Councilors in the organization and improvement of the county societies in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall employ such assistants as may be ordered by the House of Delegates with the approval of the Association, and shall make an annual report to the Association. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessment and collect the same. Acting with the committee on scientific work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Association. He shall be editor of the Journal of the Medical Association of Georgia. He shall employ such assistants as may be ordered by the Council or the House of Delegates. He shall annually make a report of his doings to the House of Delegates.

He shall furnish a balance sheet at each annual meeting for the past fiscal year to be published in the Journal. This shall consist of an itemized statement of all financial transactions of the past year, all accounts made, money received and from whom and all moneys disbursed, to whom, and for what purpose, with vouchers attached. A fiscal year includes the period of time between the first day of May and the last day of April.

CHAPTER V.—COUNCIL

Section 1. The Council shall meet on the day preceding the annual session and daily during the session, and at such other times as necessity may require, subject to the approval of the President. It shall meet on the last day of the annual session of

the Association to organize and outline work for the ensuing year. It shall elect a chairman and clerk, who, in the absence of the Secretary of the Association, shall keep a record of its proceedings. It shall, through its chairman, make an annual report to the House of Delegates. It shall be the business body of the Association and attend to the business of the Association in the interim between meetings.

Sec. 2. Each Councilor shall be organizer and peacemaker for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the conditions of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district at the annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the House of Delegates on a properly itemized statement, but this shall not be construed to include his expense in attending the annual session of the Association. Each Councilor may appoint a Vice-Councilor to assist him in the performance of his duties in that district.

Sec. 3. The Council shall be the board of censors of the Association. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the general meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of a component society, on which an appeal is taken from the decision of an individual Councilor, or to which attention has been called by the Councilor or interested members. It shall hear and decide all questions affecting unethical conduct on the part of any members at any annual session, and its decision in all such matters shall be final when ratified by the Association.

Sec. 4. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and these societies, when organized and chartered shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

Sec. 5. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions and memoirs of the Association, and shall have authority to appoint such assistants to the editor as it deems necessary. It shall manage and conduct the Journal of the Medical Association of Georgia, which is the organ of the Association, and

all money paid into the treasury as dues shall be received as subscriptions to the Journal.

All money received by the Council and its agents, resulting from the discharge of the duties assigned to them, must be paid to the Secretary-Treasurer of the Association. As the Finance Committee it shall annually audit the accounts of the Secretary-Treasurer and other agents of this Association, and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Association during the year, and the amount of all other property belonging to the Association under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the office of the Secretary-Treasurer, the Council shall fill the vacancy until the next annual election.

Sec. 6. All reports on scientific subjects and all scientific discussions and papers heard before the Association, shall be referred to the Journal of the Medical Association of Georgia for publication. The editor, with the consent of the Councilor for the district in which he resides, may curtail or abstract papers or discussions, and the Council may return any paper to its author which it may not consider suitable for publication.

Sec. 7. All commercial sessions shall be within the control and direction of the Council.

Sec. 8. In the absence of a Councilor and Vice-Councilor the President is empowered to appoint a representative from the district as acting Councilor, who shall have full rights and power of a Councilor.

Sec. 9. Each Councilor shall render at every session a written report of each county in his district.

Sec. 10. Any member of the Council who fails to attend two regular successive sessions of the Council, or whose district does not show evidence of the performance of his duties during the year, unless he renders an acceptable excuse to the Council, is subject to have his position declared vacant by the President and a successor appointed by the President.

CHAPTER VI.—COMMITTEES

Section 1. The standing committee shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Arrangements.

A Committee on Medical Defense, and such other committees as may be necessary.

Sec. 2. The Committees on Scientific Work shall consist of three members of which the Secretary-Treasurer shall be one, and shall determine the character and scope of the scientific proceedings of the Association for each session. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented.

This By-Law shall not prohibit the Committee on

Scientific Work from inviting not more than two distinguished members of the national organization to deliver addresses or read papers at any annual meeting.

Sec. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary, the Commissioner of Health of the State of Georgia, and a sub-committee of three members from each Councilor District appointed by the chairman when needed. It shall represent the Association in securing and enforcing legislation in the interest of public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections.

Sec. 4. The Committee on Arrangements shall be appointed by the component society in which the annual session is to be held. It shall provide suitable accommodations for the meeting places of the Association and of the House of Delegates and, of their respective committees, and shall have general charge of all arrangements. Its chairman shall report an outline of the arrangements to the Secretary-Treasurer for publication in the program, and shall make additional announcements during the session as occasion may require.

Sec. 5. The Committee on Medical Defense shall consist of five members, of whom the Chairman of the Council and the Secretary-Treasurer of the Association shall be members. The other members, one of whom shall act as Chairman of the Committee, shall be elected by the Council for a period of five years. Those elected at this meeting (April 19, 1916), shall serve one, three and five years, respectively.

It shall be the duty of the Committee on Medical defense to investigate and defend all damage suits against the Medical Association of Georgia; to investigate all claims of civil malpractice made against its members; to take full charge of such cases, which after investigation, they decide to be proper cases for defense; to defend all such cases in the courts of last resort and pay all costs of such defense. However, they shall not pay, or obligate the Medical Association of Georgia to pay any judgment rendered against any member upon the final determination of any case. They shall be empowered to contract with such agents or attorneys as they may deem necessary for the proper carrying out of this By-Law.

The assistance for defense, as herein provided, shall be available only to members of the Medical Association of Georgia in good standing. Any member who has not paid his annual dues by April 1st shall not be considered in good standing in the application of this By-Law.

Any member or members of the Association threatened with suit for civil malpractice shall immediately

communicate with the Secretary of the Association and shall give full and complete information in reference to all the circumstances alleged in the complaint. The Secretary shall proceed immediately to investigate the circumstances reported and shall advise with the attorneys or agents employed by the Committee for this purpose. The member sued, or threatened with suit, shall be consulted and shall have the complete confidence of the Committee in all transactions connected with the investigation in question. The Committee shall have the authority to require of a constituent society or the president thereof, the appointment of a committee of investigation in any such case, and it may direct the committee so appointed to report to the Committee on Medical Defense and not to the society from which it was appointed.

The Committee on Medical Defense may also, at its discretion, arrange to prosecute illegal practitioners in the State of Georgia and assist in the enforcement of the Medical Practice Act of this State.

CHAPTER VII.—COUNTY SOCIETIES

Section 1. All county societies now in affiliation with this Association, or those which may hereafter be organized in the State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall on application, receive a charter from and become a component part of this Association.

Sec. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charter shall be issued thereto.

Sec. 3. Charters shall be issued only on approval of the Council, and shall be signed by the President and Secretary of this Association. The Association shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Sec. 4. Only one competent medical society shall be chartered in any county.

Sec. 5. Each county society shall judge of the qualifications of its own members, but as such societies are the only portals to this Association, every reputable and legally registered white physician who does not practice or claim to practice, nor lend his support to any exclusive system of medicine, shall be eligible to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

Sec. 6. No matter what the unethical conduct or discipline of the members of the county society may be, both plaintiff and defendant shall have the right to appeal to the Council whose decision shall be final when ratified by the Association.

Sec. 7. In hearing appeals the Council may admit oral or written evidence, as in its judgment will best and most fairly present the facts, but in case of

every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 8. When a member in good standing in a component county society moves to another county in this state, he shall be given a written certificate of these facts by the secretary of his society, without cost, for transmission to the secretary of the society in the county to which he moves. Such member shall be considered to be in good standing from the county society from which he was certified and in the Medical Association of Georgia to the end of the period for which his dues have been paid. (Amended, May, 1929, page 476-7)

Sec. 9. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the component society in whose jurisdiction he resides.

Sec. 10. Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Sec. 11. At some meeting in advance of the annual session of this Association, each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Association, in the proportion of one delegate to each fifty members, or fraction thereof, and the Secretary of the society shall send a list of such delegates to the Secretary of this Association at least ten days before the annual session.

Sec. 12. The Secretary of each component society shall keep a roster of its members, and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Sec. 13. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates, and lists of non-affiliated physicians of the county, to the Secretary of this Association each year, thirty days before the annual session.

Sec. 14. Any county society which fails to pay its assessment, or make the report required, on or before April 1 of each year, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association, or of the House of Delegates, until such requirement has been met.

Sec. 15. The Secretary of each county society shall report to the Journal of the Medical Association of Georgia full minutes of each meeting and forward to it all scientific papers and discussions which the society shall consider worthy of publication.

CHAPTER VIII.—RULES AND ETHICS

Section 1. The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

Sec. 2. All papers read before the Association shall become its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

Sec. 3. The principles of medical ethics of the American Medical Association shall be those of this Association.

Sec. 4. Any member of this Association, on locating in a new place for practicing his profession may place his professional card, containing name, address, telephone number, and statement as to whether or not his practice will be limited to any particular class of disease, in the local paper for a period of not longer than one month. The placing of such card for this period of time shall not be considered unethical. The use of the word "specialist" by any member in connection with his name in any newspaper, telephone directory, or other public places, shall be considered unethical.

CHAPTER IX.—AMENDMENTS

These By-Laws may be amended at any annual session by a majority vote of the Association after the amendment has lain on the table for one day.

RESOLUTIONS, MEDICAL ASSOCIATION OF GEORGIA

1921

Resolved, That a member who sends in a title of a paper to be placed on the program and is not present to read the paper, shall pay the penalty of not having an opportunity to appear on the program for two years, unless he presents an excuse acceptable to the Committee on Scientific Work.

1922

Be it Resolved, That the House of Delegates recommend that the Committee on Scientific Work make available on the program of the State Association space for two papers from each Councilor district; that a definite time be assigned for reading and discussion of each of these papers, and they be given precedence over all other business. The said papers are to be selected by the Committee on Scientific Work, and, in case a writer does not respond when his name is called, some paper will be substituted and the schedule not deranged. The President ruled that this resolution is only a recommendation and not a law.

1928

Resolved, That the delegates to the A. M. A. elected at this and succeeding meetings of the Medical Association of Georgia take office January 1st, following their election, and that their term of service run for two years thereafter. And be it further

Resolved, That our delegates be authorized to attend the regular and any called meeting of the House of Delegates of the American Medical Association during the term, to which they are elected.

1929

Resolved, That the House of Delegates approve the increase of dues to \$7.00 per capita per annum.

Resolved, That the House of Delegates adopt the report of the Council authorizing the Committee on Public Policy and Legislation to spend the necessary amount of money to carry on its work.

Resolved, That in order to expedite the business of the House of Delegates, all reports of special and regular committees of the Association involving matters of public policy, legislation or appropriation of the funds of the Association be submitted in writing to the Secretary of the Association a sufficient time in advance of the regular annual session, about March 15th, to permit of the publication of said recommendations either in the official program prior to the session or in a special circular that shall be mailed to the constituent societies, in order that the delegates may be advised of the proposed changes. (May, 1929, page 475.)

1930 REFERENCE COMMITTEE REPORT ADOPTED

1. That it is not advisable to employ anyone on a salary to secure members for the Medical Association of Georgia.

2. That Health Education Week be inaugurated as an annual procedure.

3. That efforts be made to effect a closer bond between the Medical Association of Georgia and the County and District Societies.

4. That District Societies be urged to have two meetings annually.

5. That the District Societies be urged to have the same dates for their meetings each year and to retain them, when practical, so that a definite schedule can be arranged.

6. That the program each year contain a list of ex-presidents.

RECOMMENDED

1. That a permanent historian be nominated by the Committee on History, or the sub-committee, and be elected in the usual manner, this historian to immediately begin the writing of the late history of the Medical Association of Georgia, starting with the year 1925-1926.

CONSTITUTION, ARTICLE IX PROPOSED AMENDMENT

Amendment submitted to add the word "Historian" in line three of Section 1 after the word "Parliamen-

tarian", so when amended, Article IX, Section 1.— "Officers", will read as follows: "The officers of this Association shall be a President, President-Elect, two Vice-Presidents, Secretary-Treasurer, Parliamentarian, Historian, and twelve Councilors, one from each Congressional District of the State."

CIRCLE TOURS OF ATLANTA BY AUTOMOBILE NORTH SIDE

The tourist leaves the downtown district by way of Peachtree Street. This street is one of the most famous thoroughfares in the South and legend tells us it received its name from an Indian village, which stood north of the present city of Atlanta and was known as the "Standing Peachtree." With the coming of the white man and civilization "Peachtree Trail" became Peachtree Street.

Going north on Peachtree you pass the Shrine Mosque, Atlanta Elk's Club, The Atlanta Woman's Club and the High Museum of Art. At the Pershing Point Apartments turn east into Peachtree Circle and motor through beautiful Ansley Park. Notice the variety of architecture and landscaping, the graceful circles, boulevards and drives that cause Atlanta's residential sections to be classed among the most beautiful in America. On the Prado we pass the Governor's Mansion and presently turn south into Piedmont Avenue, passing the Piedmont Driving Club, scene of many brilliant social affairs. Piedmont Park was a part of the battleground of the War Between the States and was the scene of the Cotton States Exposition in 1893.

Circle the swimming pool and leave the Park by Park Drive, through Boulevard Park to Highland Avenue, thence to Ponce de Leon and north on Ponce de Leon past the lovely homes of Druid Hills, set in their spacious wooded grounds, to Decatur, suburban college town. At DeKalb courthouse in Decatur drive north on Clairmont Avenue to North Decatur Road, west on North Decatur Road to Wallace Mill Road, and to the entrance of Emory University. The beautiful campus contains 160 acres and many beautiful marble and stone buildings. Returning by way of North Decatur Road and Briarcliff Road to Ponce de Leon Avenue, the visitor passes many beautiful residences. Right on Ponce de Leon past the Ford Assembly Plant, Sears, Roebuck and Company, Spiller's Park, you soon reach Ponce de Leon and Peachtree Street. Thence left on Peachtree to the downtown section.

Spend the afternoon shopping or at the theater and see more of Atlanta tomorrow.

ANTIPOLIOMYELITIS MORSE SERUM; PREPARATION AND USE

MARCUS NEUSTAEDTER, New York (*Journal A. M. A.*, March 21, 1931), states that the efficacy of his antipoliomyelitis horse serum and that of Pettit of Paris, who followed his method, was shown in more than sixty cases of frankly paralytic cases of poliomyelitis. The earlier a case is diagnosed the better will be the result of the serum, if given early.

GEORGIA STATE NURSES ASSOCIATION

Officers

President—Miss Lucia Massee, R. N., Cuthbert
 First Vice-President—Miss Dora A. Kershner, R. N., Macon.
 Second Vice-President—Mrs. Mae M. Jones, R. N., Milledgeville.
 Secretary—Miss Winnie B. Wood, R. N., Macon.
 Treasurer—Miss Jane Van De Vrede, R. N., Atlanta.
 Miss Jane Van De Vrede, R. N.
 Executive Secretary

District Presidents

First—Mrs. Dorothy Treackle, R. N., Savannah.
 Fourth—Miss Eva Chalkley, R. N., Columbus.
 Fifth—Mrs. Sue B. Paille, R. N., Atlanta.
 Sixth—Miss Dora A. Kershner, R. N., Macon
 Seventh—Miss Shirley Hamrick, R. N., Cedartown.
 Eighth—Mrs. W. C. Thurmond, R. N., Athens.
 Ninth—Miss Ruby Falls, R. N., Gainesville.
 Tenth—Mrs. Joseph Akerman, R. N., Augusta.

Headquarters

131 Forrest Avenue, N. E., Atlanta.

CONVENTION OF THE NATIONAL LEAGUE OF NURSING EDUCATION COMES TO ATLANTA MAY 4-9

The thirty-seventh annual convention of the National League of Nursing Education will bring to Atlanta, May 4-9, about five hundred delegates and members, representing leadership in the educational field of nursing.

The league has for its prime motivation the direction of education of the nurse, and the keynote of the coming convention will be The School of Nursing, with emphasis on the correlation of ward and classroom work of the student nurse, and the preparation of the faculty.

Succeeding the American Society of Superintendents of Training Schools for Nurses, organized in New York on the 10th of January, 1894, the league is actually the outgrowth of the gathering together during the World's Fair in Chicago, in 1893, of a number of interested groups of nurses and hospital people—among them the representatives of the Hospital and Medical Congress.

Largely through the interest and effort of Mrs. Bedford Fenwick, well-known English nurse, a nursing section of the Hospital and Medical Congress was formed, with Miss Isabel Hampton—later Mrs. Robb—principal of the Johns Hopkins School of Nursing, as chairman.

Such fundamentals as "What Is a Trained Nurse?" and "What Are Nursing Ideals?", "Comparative Value of Theory and Practice," etc., were some of the subjects discussed at the early meetings; and, among the pioneer members of the Society of Superintendents, were such notable women as Diana Kimber, Linda Richards, Lavinia Dock, Adelaide Nutting, Isabel McIsaac, and others.

The National League meets biennially with the American Nurses' Association, and, in

1920, Atlanta nurses entertained the "biennial" of these organizations.

In the coming convention, some of the later teaching methods will be treated in papers and addresses of such speakers as Annie W. Goodrich, Dean of the Yale University School of Nursing; Daisy Dean Urch, of the Leland Stanford University School of Nursing; Anna D. Wolf, of the University of Chicago, and others whose knowledge of nursing, through years of study, research, and practical experience, makes them preeminently competent to advance opinions and advocate measures. Foremost educators in general and special fields will also appear on the program, notably Dr. William H. Burton, Ph.D., Professor of Education of the University of Chicago, who will discuss "The Administration of Supervision," one of the most important phases of hospital nursing service.

Dr. C. W. Roberts Will Address Convention

Dr. C. W. Roberts, Associate Professor of Surgery, Emory University, and President of the Southeastern Surgical Congress, will be another prominent speaker. "New Tendencies Versus Old Practices in the Healing Arts" is the topic of Dr. Roberts' paper, which will be delivered before the open meeting, Monday evening, May 4th, at the Shrine Mosque.

In addition to nurses, this meeting is expected to assemble many doctors and lay people interested in training schools, nursing service, hospitalization and kindred subjects. A cordial invitation is extended to all these groups to attend the meeting and the informal reception taking place in the foyer and lounge of the Mosque afterwards.

Mrs. Eva S. Tupman, President of the Georgia League of Nursing Education, will preside over the Monday evening meeting, and Dr. Witherspoon Dodge, pastor of the Congregational and Radio Church of Atlanta, will pronounce the invocation. Dr. Harvey W. Cox, Ph.D., LL.D., President of

Emory University, will welcome the guests. Miss Elizabeth Burgess, of New York, President of the National League of Nursing Education and Associate Professor of Nursing Education, Teachers' College, Columbia University, will give her annual address, and the Walter Burns Saunders' Medal, given annually to that nurse who has made to the profession or to the public some outstanding contribution either in personal service or in the discovery of some nursing technique, will be presented.

Members of the Fifth District of the Georgia State Nurses' Association and the Women's Auxiliary to the Fulton County Medical Society will be hostesses at the reception.

Session on the Grading of Nursing Schools

Tuesday morning, May 5th, the convention will enter seriously into its program of work. "Findings of the Grading Committee" will be the subject of the first session. Miss Stella Goostray, Superintendent of Nurses of the Children's Hospital, Boston, and nurse consultant of the Committee on the Grading of Nursing Schools, will preside. Dr. May Ayres Burgess, Ph.D., Director of the Committee on the Grading of Nursing Schools, will be among those discussing the subject of grading, the relation of the school to the hospital, etc. The findings of this committee are of great import to nurses, physicians, hospitals, and the public, since they represent a picture of hospital and nursing conditions as they relate to the schools and so-called schools of nursing of this country, with problems to be solved which call for the best thought of the professions and interests concerned.

Other important sessions will deal with the findings of the Committee on Education, Miss Isabel M. Stewart, Professor of Nursing Education, Teachers' College, Columbia University, Chairman; with the Instructors' Section, Miss Ella Best, Field Secretary of the A. N. A., Chairman; Administration, Miss Nellie X. Hawkinson, Dean of the School of Nursing, Western Reserve University, Cleveland; Public Health, over which Miss Lillian M. Alexander, Director of Nursing Service, city of Atlanta, and President of the Georgia State Organization for Public Health Nursing, will preside.

Round Table Discussions

Round table discussions of pertinent subjects will be conducted, among the participants being Miss Katherine J. Densford, Dean of the School of Nursing, University of Minnesota; Miss Laura Logan, Dean of the Cook County Hospital School of Nursing, Chicago; Miss Adda Eldredge, Director of the

Bureau of Nursing, State Health Department, Madison, Wis.; Miss Florence Bacon, Assistant to the Director, Bellevue School of Nursing, New York; Miss Jessie M. Candlish, Superintendent of Eggleston Memorial Hospital for Children, Atlanta, and others.

New teaching methods will be illustrated through an exhibit of movietone pictures sponsored by the Committee on Education and given by the Electric Research Products Company.

A program devoted to the prevention of blindness will be included. Dr. B. Franklin Royer, Medical Director of the National Society for the Prevention of Blindness, leading in the discussion. Miss Bessie Baker, Dean of Nursing, Duke University, Durham, N. C., and Miss Zoe Laforge, Health Department, Birmingham, Ala., will participate in this program.

Numerous delightful social features have been planned for the enjoyment of the visitors. On Wednesday afternoon Mrs. Thomas M. Erwin will open her home on Oakdale Road in honor of the visitors, tea being poured from 4:30 to 6:30. Thursday an informal dinner will be given on the terrace of the Hotel Biltmore, Miss Lillian Cumbee, Secretary of the G. L. of N. E., presiding.

The Biltmore Hotel will be headquarters, and all meetings will be held there except the Monday evening meeting at the Mosque.

Official hosts of the convention are members of the Georgia League of Nursing Education and of the Fifth District, G. S. N. A., and the local committee is composed of Mrs. Eva S. Tupman, Chairman; Miss Jane Van De Vrede, and Miss Annie Bess Feebeck.

The railroads have granted the usual fare-and-a-half rate for the round trip taken within ten days on the identification certificate plan. State league presidents have full information and will furnish identification certificate, which is to be presented to the ticket agent when buying ticket. Georgia nurses should address Mrs. Eva S. Tupman, President of the Georgia League of Nursing Education, Grady Hospital.

MOTHER'S DAY HAS A NEW SIGNIFICANCE

A new significance is being attached to Mother's Day, May 10th, this year, through the efforts of the Maternity Center Association.

This organization, with headquarters in New York, through an educational campaign, is directing the attention of the American people to the deplorable maternal death rate—the highest in any civilized country in

the world—with a view to securing adequate maternity care for every mother.

The Maternity Center Association has issued facts and figures indicating that the lives of 10,000 of the 16,000 mothers in America who died each year, according to statistics gathered by Louis I. Dublin, Statistician of the Metropolitan Life Insurance Company, may be saved. The death rate of mothers in the United States is 6.5 per thousand.

Mr. Dublin, who has studied the records of 4,726 mothers cared for by the Maternity Center Association, found that the mortality rate among them was only 2.2 per thousand mothers.

The plan of the Maternity Center Association is to secure publicity regarding the method of maternity care through newspapers and magazines; through pictures, stories, editorial comment and articles for use on Mother's Day. Radio talks will be made from coast to coast.

DR. EDWARD C. DAVIS

Whereas, Dr. Edward C. Davis, beloved physician and surgeon of Atlanta, Georgia, departed this life March 11, 1931,

Be it Resolved, That we, the Executive Board of the Georgia State Nurses Association, express the appreciation of the nurses of the state for the contributions made by Dr. Davis to the nursing profession; for his understanding, sympathy and support of our endeavors; for his teaching and example of ethical standards, and for his great and kindly consideration of nurses during his sickness as well as when in health;

Be it further Resolved, That a copy of this resolution be sent to Mrs. Davis, copies furnished the Fulton County Medical Society and the Medical Association of Georgia, and a copy be sent to the press.

Lucia M. Massee, President;
Dora A. Kershner, 1st Vice President;
Mrs. Mae M. Jones, 2nd Vice President;
Winnie B. Wood, Secretary;
Jane Van De Vrede, Treasurer;
Mrs Dorothy Treackle, Pres., 1st District;
Eva Chalkley, Pres., 4th District;
Sue B. Paille, Pres., 5th District;
Dora A. Kershner, Pres., 6th District;
Shirley C. Hamrick, Pres., 7th District;
Mrs. W. C. Thurmond, Pres., 8th Dist.;
Ruby Falls, Pres., 9th District;
Mrs. Joseph Akerman, Pres., 10th District;
Hattie Wilder, Counsellor;
Vera Mingledorf, Counsellor;
Annie Bess Feebeck, Counsellor;
Beulah Carrington, Counsellor;
Mrs. Eva S. Tupman, Pres., G. L. of N. E.;
Lillian M. Alexander, Pres., S. O. P. H. N.;

By JANE VAN DE VREDE, Ex. Sec.

March 14, 1931.

COUNTY SOCIETIES

1931 HONOR ROLL*

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 4, 1930.
2. Butts County, Dr. Robert L. Hammond, Jackson, December 2, 1930.
3. Monroe County, Dr. G. H. Alexander, Forsyth, February 18, 1931.
4. Ware County, Dr. Kenneth McCullough, Waycross, March 27, 1931.

*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

NEW MEMBERS FOR 1931

Adair, E. W., Atlanta.
Anderson, Sam A., Dubach, La.
Bowers, W. L., Camilla.
Brooks, Fletcher H., Thomasville.
Estes, H. G., Atlanta.
Groover, Gordon L., Savannah.
Heriot, George W., Jr., Savannah.
Lucas, W. H., Stillmore.
Metts, James C., Savannah.
Milton, P. H., Jr., Waycross.
Neel, M. M., Atlanta.
Para, A. W., Nashville.
Powell, Ennis C., Swainsboro.
Smith, R. H., Griffin.
Stillman, W. K., Atlanta.
Tankersley, J. S., Ellijay.
Taylor, Lloyd B., Savannah.
Vinton, Luther M., Atlanta.
Welch, Carl B., Bainbridge.
Williams, A. D., Folkston.
Witt, M. S., Manchester.

COUNTIES REPORTING FOR 1931

Blue Ridge Medical Society

The Blue Ridge Medical Society announces the following officers for 1931:

President—J. S. Tankersley, Ellijay.
Vice President—N. C. Goss, Ellijay.
Secretary-Treasurer—C. B. Crawford, Blue Ridge.
Delegate—C. B. Crawford, Blue Ridge.
Censors—J. M. Daves, J. S. Tankersley, and C. B. Crawford.

Brooks County Medical Society

The Brooks County Medical Society announces the following officers for 1931:

President—J. R. McMichael, Quitman.
Secretary-Treasurer—R. E. McClure, Quitman.

Ware County Medical Society—100 Per Cent

The Ware County Medical Society announces the following officers for 1931:

President—B. R. Russell, Waycross.
Vice President—George E. Atwood, Waycross.
Secretary-Treasurer—Kenneth McCullough, Waycross.
Delegate—J. E. Penland, Waycross.
Alternate Delegate—W. F. Reavis, Waycross.
Censors—D. M. Bradley, W. D. Mixson and W. M. Folks.

WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA OFFICERS

President.....Mrs. Chas. C. Harrold, Macon
President-Elect.....Mrs. Ralston Lattimore, Savannah
1st Vice-Pres.....Mrs. S. T. R. Revell, Louisville
2nd Vice-Pres.....Mrs. W. W. Battey, Sr., Augusta
3rd Vice-Pres.....Mrs. J. E. Penland, Waycross

Recording Sec.....Mrs. J. Cox Wall, Eastman
Cor. Sec.....Mrs. Wm. R. Dancy, Savannah
Treasurer.....Mrs. Ben Bashinski, Macon
Parliamentarian.....Mrs. A. H. Bunce, Atlanta
Editor.....Mrs. C. W. Roberts, Atlanta

COMMITTEES AND MANAGERS

STUDENT EDUCATIONAL COMMITTEE 1930-1931

Mrs. W. R. Shearouse, Savannah, Chairman.

Three-Year Term: Mrs. Lee Howard, First District, Savannah, Ga.; Treasurer; Mrs. W. J. Cranston, Tenth District, Augusta, Ga.; Mrs. J. L. King, Sixth District, Macon, Ga.; Mrs. Marion Benson, Fifth District, Atlanta, Ga.

Two-Year Term: Mrs. Stewart Brown, Eighth District, Royston, Ga.; Mrs. C. L. Ayers, Ninth District, Toccoa, Ga.; Mrs. E. B. Claxton, Twelfth District, Dublin, Ga.; Mrs. G. Y. Moore, Third District, Cuthbert, Ga.

One-Year Term: Seventh District, Vacant; Mrs. Enoch Callaway, Fourth District, LaGrange, Ga.; Mrs. Gordon Chason, Second District, Bainbridge, Ga.; Mrs. B. H. Minchew, Eleventh District, Waycross, Ga.

Note: You will see that the whole committee has to be appointed this year. After this year the members will be chosen for three years.

COMMITTEE ON PUBLIC RELATIONS

1930-1931

Chairman, Mrs. J. K. Quattlebaum, Savannah; Mrs. Charles E. Waits, Atlanta; Mrs. W. A. Selman, Atlanta; Mrs. J. E. Mercer, Vidalia; Mrs. James B. Dillard, Davisboro; Mrs. Charles C. Hinton, Macon.

COMMITTEE ON HEALTH EDUCATION

Mrs. S. T. R. Revell, Louisville, Chairman; Mrs. T. H. Johnston, Athens; Mrs. M. B. Allen, Hoschton; Mrs. J. D. Applewhite, Macon; Mrs. V. H. Bassett, Savannah; Mrs. A. T. Coleman, Dublin; Mrs. W. H. Garrison, Clarksville; Mrs. Herschel Smith, Americus.

DISTRICT MANAGERS

First District, Mrs. L. F. Lanier, Sylvania.
Second District, Mrs. Gordon Chason, Bainbridge.
Third District, Mrs. Thad. Wise, Americus.
Fourth District, Mrs. Enoch Callaway, LaGrange.
Fifth District, Mrs. Dan Sage, 47 Inman Circle, Atlanta.
Sixth District, Mrs. Wallace Bazemore, Beverly Place, Macon.
Seventh District, Vacant.
Eighth District, Mrs. D. N. Thompson, Elberton.
Ninth District, Mrs. C. B. Almond, Winder.
Tenth District, Mrs. James B. Dillard, Davisboro.

Eleventh District, Mrs. H. G. Huey, Homerville.
Twelfth District, Mrs. W. E. Beddingfield, Rentz.

INVITATION

To the Members of the Auxiliary:

The Woman's Auxiliary to the Fulton County Medical Society is gratified that your next annual meeting will be held at the Biltmore Hotel in Atlanta, May 12, 13, 14. We extend to you a cordial invitation to attend the business meetings of the Auxiliary together with all entertainments. One afternoon will be devoted to tea and a motor ride over the city and to points of interest near Atlanta. One evening will be given over to the President's reception, banquet and dance. Our resources and services will be tendered all members to make this meeting an outstanding success.

Faithfully yours,

MRS. J. BONAR WHITE, *President*,
Woman's Auxiliary to the Fulton County
Medical Society.

SEVENTH ANNUAL MEETING

ATLANTA, MAY 12, 13, 14

Tentative Program

Wednesday, May 13

Meeting of Executive Committee and Delegates.
Invocation.
Address of Welcome.
Response.
Minutes of last meeting of Executive Committee and Delegates.
Report of Program Committee.
Greetings from the Medical Association of Georgia.
Dr. G. Y. Moore, President.
Introduction of Honor Guests.
Report of Committee on Credentials.
Reports of District Managers.
Reports of County Auxiliaries.
Appointment of Special Committees.
Health Film—Mrs. John A. Selden.
(Special film to be shown. Time to be designated.)
Adjournment.
WEDNESDAY AFTERNOON
Tea and Drive for Delegates and Visitors.

THURSDAY, MAY 14

10:30 a.m.—General Meeting.

Invocation.

Minutes of last Annual Meeting.

11:00 a.m.—Address: "Where Are We Drifting?"

Dr. Arthur G. Fort, President-Elect, Medical Association of Georgia.

11:30 a.m.—Address: "State Government and Public Health." Hon. Orville A. Park, Macon, Ga.

Report of S. M. A. Auxiliary Meeting in Louisville—Mrs. J. N. Brawner.

Unfinished Business.

Report of President—Mrs. Charles Cotton Harrold.

Report of President-Elect—Mrs. Ralston Lattimore.

Report of First Vice-President—Mrs. S. T. R.

Revell.

Report of Second Vice-President—Mrs. W. W.

Battey.

Report of Third Vice-President—Mrs. J. E.

Penland.

Report of Treasurer—Mrs. Ben Bashinski.

Report of Corresponding Secretary—Mrs. William R. Dancy.

Report of Recording Secretary—Mrs. J. Cox Wall.

Reports of Standing Committees

Health Education—Mrs. S. T. R. Revell.

Public Policy and Legislation—Mrs. J. K. Quattlebaum.

Students Aid Fund—Mrs. W. R. Shearouse.

Health Films—Mrs. John A. Selden.

New Business.

Reports of Special Committees

Resolutions.

Courtesy.

Nominations.

Elections of Delegates to the A. M. A. and to the Southern Medical Association.

Election of Officers.

Adjournment.

Meeting of the New Board.

THURSDAY P.M.

Reception, Banquet, and Dance.

EIGHTH DISTRICT REPORT

The Woman's Auxiliary to the Eighth District Medical Society met in Athens, Ga., Feb. 11, 1931. The meeting was held at the Nanette Tea Room with Mrs. D. N. Thompson, Elberton, District Chairman, presiding. The following program was given:

Invocation—Mrs. D. J. Thornton, Elberton.

Welcome Address—Mrs. Charles Brightwell, Athens.

Response—Mrs. B. C. Teasley, Hartwell.

Report of County Activities

Address—Mrs. C. C. Harrold, State President.

Music—Gilmore Brothers.

Southern Auxiliary Meeting—Mrs. James Brawner, Atlanta.

Benefits Derived From Small Hospitals—Miss Linda Bray, Superintendent, Athens General Hospital.

Student's Educational Loan Fund—Mrs. Stewart Brown, Royston.

Educational Health Films—Mrs. J. A. Selden, Macon.

Address—Mrs. S. T. R. Revell, Louisville.

Address—Mrs. Johnson, Athens.

A donation of \$9.60 was made by the Gilmore Brothers to the Student Loan Fund. The ladies were entertained at lunch at the Nanette Tea Room by the Clarke County Auxiliary.

THIRD DISTRICT MEETING

The semi-annual meeting of the Woman's Auxiliary of the Third District was called to order in Americus on November 19, 1930, by Mrs. Thad Wise, in absence of the president, Mrs. Ward, of Fitzgerald. The meeting was opened with the Lord's Prayer, after which the minutes were read and approved. A beautiful piano duet, arrangement of Grieg's "Peer Gynt Suite", was rendered by Miss Rossee Andrews and Mrs. Ford Ware.

The State President, Mrs. C. C. Harrold, then addressed the Auxiliary. She said the Woman's Auxiliary should be educational, it should be cooperative with all organizations sponsoring health, particularly with the P. T. A., seeing that children have vaccines of all kinds. She mentioned that doctors' wives can get information through "Hygeia", Medical Journals, etc. She outlined some of the many objectives of the Auxiliary, chief of which is the Student Loan Fund. Last year one boy was helped; this year, funds divided supplied to three. Mrs. Harrold stressed the importance of using Health Films, stating that the Metropolitan Life Insurance Company furnish good ones free. She urged that we have committees on Health Education, Public Policy, and Legislation.

Dr. G. Y. Moore, President of the Medical Association of Georgia, brought greetings from the State Association and called attention to the Child Health Council then in session in Washington.

Reports were made by delegates from the following counties; Randolph, Mrs. G. Y. Moore; Turner, Mrs. Story; Macon, Mrs. F. M. Mullino; Sumter, Mrs. Anderson. There being no other business the Auxiliary adjourned.

Respectfully submitted,

MRS. F. M. MULLINO.

FULTON COUNTY

The members of the Auxiliary to the Fulton County Medical Society entertained the visiting wives of physicians who came to Atlanta to attend the meeting of the South-eastern Surgical Congress on March 9th and 10th. Luncheon was served at the Piedmont Driving Club, followed by a motor tour of the city and suburbs.

REPORT OF WASHINGTON COUNTY

A review of the activities of the Washington County Health Unit shows 1930 to have been the busiest since its establishment. The report just completed by Dr. O. L. Rogers and Mrs. Sarah Ponder English is as follows (immunizations completed):

Typhoid, 5,375; Toxin anti-toxin, 292; Number examined for hookworm, 453; Treated for hookworm, 328; School children examined, 3,380; Defective children, 1,909; total number of defects, 2,425; Quinine distributed, 729,000 grains; Yeast distributed, 1,480 lbs.; Conducted malaria campaign; Assisted state officers in tuberculosis clinic; Forty patients examined and 238 specimens sent to state laboratory; Public meetings addressed, 13; attendance, 1,185; School talks given, 41; attendance, 5,801; Vital statistics report give total births, 430 (156 white, 264 colored); Total deaths, 291 (121 white, 159 colored).

We think this very good and rest assured our Woman's Medical Auxiliary is on the job in working with the Health Unit and through the various women's organizations to make Washington County 100 per cent in health.

MRS. JAS. B. DILLARD

DEATH NOTICE

Mrs. Bowman Joel Wise, Plains, died March 29, 1931, at Americus, Ga. Mrs. Wise was District Manager for the Third District Woman's Auxiliary to the Medical Association of Georgia. With a sense of irreparable loss to our Auxiliary, we wish to express our deepest sympathy and sincerest condolences to the family and intimate friends.

"A SIGNIFICANT CONTRIBUTION TO THE
NEWER KNOWLEDGE OF VIOSTEROL
IN RICKETS"

One of the Mead Johnson Research Fellowships has reported (J. A. M. A., August 2, 1930) its very thorough and extensive clinical experience with Mead's Viosterol in the prevention and cure of rickets.

Coming at a time when viosterol is finding its proper place as a therapeutic agent of great value, this reprint, containing the charts omitted from the original paper for lack of space, should interest every physician who prescribes viosterol or cod liver oil in rickets.

DEDICATION SERVICES, CRAWFORD
W. LONG MEMORIAL HOSPITAL
AND CLINIC AT DAVIS-
FISCHER SANATORIUM

*Unveiling of a Medallion to Dr. Crawford
W. Long and Tablets to Dr. Joe
Jacobs and Dr. E. C. Davis*

March 30, 1931, at 2:00 P.M.

Dr. Frank K. Boland, Chairman

PROGRAM

Invocation—Rev. Richard Orme Flinn.

Address—Rabbi David Marx.

Remarks—Mrs. A. R. Colcord, Regent, representing Joseph Habersham Chapter, D. A. R.; Mrs. Bun Wylie, State Regent, representing D. A. R. of Georgia; Mrs. John A. Perdue, State Honorary President, representing State members U. D. C.

Unveiling of the Medallion of Doctor Long by his two surviving daughters, Miss Emma Long and Mrs. Eugenia Long Harper.

Remarks—Dr. E. G. Ballenger, representing Emory Unit, Base Hospital No. 43, A. E. F., U. S. Army, 1918-19.

Short Address by Gov. L. G. Hardman, M.D.; Judge Richard B. Russell, Chief Justice Supreme Court of Georgia; Mayor James L. Key; Dr. Allen H. Bunce, Secretary-Treasurer, Medical Association of Georgia; Dr. T. C. Davison, President, Fulton County Medical Society.

A pledge of loyalty by Miss Caroline Sutton, R. N., Superintendent.

A pledge of loyalty by Miss Alice R. Thompson, R. N., President, Davis-Fischer Sanatorium Alumni Association.

Introduction of Dr. J. G. Earnest and Dr. Robert G. Stephens, grandnephews of Alexander W. Stephens—Judge Alexander W. Stephens (who was a roommate and classmate of Doctor Long).

Unveiling of tablet in the lobby to Dr. Joe Jacobs by his grandson, Sinclair Jacobs, Jr., son of Mr. and Mrs. Sinclair Jacobs.

Unveiling of tablet to Dr. E. C. Davis by his two youngest daughters, Sarah Fischer Davis and Theodore Lamar Davis.

Welcome to all doctors' wives to attend the seventh annual meeting of the Woman's Auxiliary at the Biltmore Hotel, Atlanta, May 13, 14, 15. We are anxious for you to participate in all our work and entertainments.

BOOKS RECEIVED

Clinical Allergy, Particularly Asthma and Hay Fever, Mechanism and Treatment. By Francis M. Rakemann, M.D., physician to the Massachusetts General Hospital; instructor in medicine, Harvard Medical School, Boston, Mass. Contains 617 pages. Publishers: The Macmillan Company, 60 Fifth Avenue, New York City. Price \$10.50.

Intestinal Toxemia (Autointoxication) Biologically Considered. By Anthony Bassler, M.D., consulting gastroenterologist of St. Vincent's, People's and Jewish Memorial Hospitals, New York City; St. John's Hospital, Yonkers; Christ Hospital, Jersey City; courtesy physician of Knickerbocker, Neuropathic, Fifth Avenue, and Pan-American Hospitals, New York City. Contains 433 pages. Publishers: F. A. Davis Company, Philadelphia. Price \$6.00.

The Practical Medicine Series, comprising eight volumes of the year's progress in medicine and surgery. *General Surgery*, edited by Evarts A. Graham, A.B., M.D., professor of surgery, Washington University School of Medicine; surgeon-in-chief of the Barnes Hospital and of the Children's Hospital, St. Louis. Series of 1930. Contains 848 pages. Publishers: The Year Book Publishers, 304 South Dearborn Street, Chicago, Ill. Price \$3.00.

Roentgen Interpretation, A Manual for Students and Practitioners. By George W. Holmes, M.D., roentgenologist to the Massachusetts General Hospital and assistant professor of roentgenology of Harvard Medical School, and Howard E. Ruggles, M.D., roentgenologist to the University of California Hospital and clinical professor of roentgenology of the University of California Medical School. Fourth edition, thoroughly revised. Contains 339 pages. Publishers: Lea & Febiger, Washington Square, Philadelphia. Price \$5.00.

Selections from the Papers and Speeches of John Chalmers DaCosta, M.D. By Samuel D. Gross, M.D., professor of surgery, Jefferson Medical College, Philadelphia. Publishers: W. B. Saunders Company, West Washington Square, Philadelphia, Pa. Price \$6.50.

NEWS ITEMS

Dr. Albert Fleming, Folkston, entertained the members of the Ware County Medical Society at Bank's restaurant to a shad supper on February 27th.

The members of the Cobb County Medical Society conducted chest clinics in cooperation with the State Board of Health at Marietta on March 19th and 20th.

Drs. H. W. Clements and Lee R. Hutchinson, Adel, entertained the members of the Lowndes County Medical Society at the Motor Inn at Adel on March 10th.

The Southeastern Surgical Congress met in Atlanta on March 9th and 10th. Dr. C. W. Roberts, Atlanta, was elected president; Dr. A. J. Mooney, Statesboro, vice president; and Dr. B. T. Beasley, Atlanta, re-elected secretary-treasurer.

The Ninth District Medical Society met at Gainesville on March 18th. The program was made up of the following: "Presidential Address," Dr. F. M. Hubbard, Commerce, president of the society; "The Unusual Necessity for Medical Organization at the Present Time," Dr. C. L. Ayers, Toccoa, councilor of the district; "Some Practical Points in the Prevention of Nervous and Mental Disorders," Dr. James N. Brawner, Atlanta; "Peroral Endoscopy," Dr. J. H. Campbell, Athens; "Differential Diagnosis of Some Abdominal Conditions," Dr. Allen H. Bunce, Atlanta, secretary-treasurer of the association; "Focal Infection—Is It a Practical Theory?" Dr. J. F. Covington, Norcross; "The Modern Concept of Tuberculosis Control," Dr. M. F. Haygood, Alto, superintendent of the State Tuberculosis Sanatorium.

The State Board of Medical Examiners met in Atlanta on March 11th. The regular meeting of the board will be held in Atlanta on June 10, 11, and 12.

Dr. and Mrs. Montague L. Boyd, Atlanta, entertained Dr. Hugh Young, of Baltimore, at dinner on March 9th at the Biltmore Hotel. Others invited to meet Dr. Young were: Dr. and Mrs. W. F. Shallenberger, Dr. and Mrs. Phinzy Calhoun, Dr. and Mrs. James E. Paullin, all of Atlanta.

The United States Civil Service Commission announces the following named open competitive examinations: Medical Officer, Associate Medical Officer, and Assistant Medical Officer. Applications in general medicine and surgery will be rated as received by the United States Civil Service Commission at Washington, D. C., until June 30, 1931. Competitors will not be required to report for examination at any place, but will be rated on their education and training, and on their experience. Full information may be obtained from the United States Civil Service Commission, Washington, D. C.

Dr. T. F. Abercrombie, Commissioner of Health for Georgia, announces a reduction in deaths of 36.1 per 100,000 population in Georgia during 1930 from malaria. This is attributed to the drainage activities carried on by the State Board of Health.

The Spalding County Medical Society met at the Strickland Memorial Hospital, Griffin, on March 17th.

The Atlanta Chapter of the Parent-Teacher Association sponsored a "Study Group Meeting," which was held in the cafeteria of the Fulton High School, Atlanta, on March 16th and 17th. The subject of better nutrition through healthful school lunches was discussed by Dr. T. C. Davison, Atlanta, president of the Fulton County Medical Society; Dr. T. F. Abercrombie, Atlanta, Commissioner of Health for Georgia; and Dr. L. G. Baggett, Atlanta, chairman of the Health Committee of the Fulton County Medical Society. The physicians and members of the Parent-Teacher Association will cooperate with Miss Leila Bunce, Atlanta, supervisor of home economics, in conducting the study.

The State Board of Health will be in charge of a

"Health Train" to be operated over the Georgia & Florida Railroad between Augusta and Valdosta, May 14th to 18th, inclusive. It will traverse the following counties: Richmond, Jefferson, Glascock, Washington, Burke, Jenkins, Bulloch, Emanuel, Toombs, Montgomery, Jeff Davis, Coffee, Atkinson, Berrien, Cook, Colquitt and Lowndes.

The United States Public Health Service, in a recent report, emphasizes the necessity that the administrative health officer should be trained for his work. This training should cover fundamentals and afford an opportunity to acquire experience in the practical conduct of the work of a health department.

The Federal Food and Drug Administration reports that 120,000 cans of substandard and adulterated ether were destroyed at Elizabeth, N. J., by the United States marshal for that district. The government tests proved the ether to be high in acidity and distinctively below the standards prescribed by the United States Pharmacopoeia.

The regular medical staff meeting of the Atlanta Tuberculosis Association was held at its offices, 282 Forrest avenue, N.E., Atlanta, on March 26th. The scientific program consisted of a symposium on "Correlation of Physical Examination with the Aid of Chart and X-Ray in Early Diagnosis of Pulmonary Tuberculosis."

The Atlanta Neurological Society held its meeting at the Academy of Medicine, Atlanta, on March 27th. Dr. Charles E. Dowman, Atlanta, read a paper, entitled "Jacksonian Epilepsy."

Dr. H. J. Vaughn announces the removal of his office to 388 Boulevard, N. E., Atlanta.

The Randolph County Medical Society met at the Woman's Club Room, Cuthbert, on April 2nd. Dr. C. K. Sharp, Arlington, read a paper entitled "A Consideration of the Physical Signs and Symptoms in Pneumonia, with a Plea for Careful Physical Examinations." Dr. W. G. Elliott, Cuthbert, and Dr. F. M. Martin, Shellman, gave clinical case reports.

The Fulton County Medical Society met at the Academy of Medicine, Atlanta, on March 19th. Dr. J. H. Kite, Decatur, and Dr. W. W. Young, Atlanta, gave a case report, "Functional Gait Disturbances," illustrated with lantern slides; Dr. L. G. Baggett, Atlanta, gave a report of the "White House Conference on Child Health and Protection"; Dr. Marion T. Benson, Atlanta, read a paper on "Uterine Hemorrhage"; Dr. George F. Eubanks, Atlanta, "Some Remote Manifestations of Rectal Disease."

The Spalding County Medical Society sponsored a tuberculosis clinic, which was held at the city hall, Griffin, on March 26-27. Dr. J. R. Anthony, Dr. T. I. Hawkins and Dr. W. C. Humphries, all of Griffin, were in charge of the examinations.

Dr. Mary J. Erickson, Thomasville; Dr. James A. Fountain, Macon; Dr. Augustus B. Jones, Atlanta; and Dr. Ernest F. Wahl, Thomasville, were made

Fellows of the American College of Physicians at a meeting held in Baltimore, Md., on March 25th.

Dr. Louis C. Rouglin, Atlanta, has been elected a member of the board of trustees of the Fulton County Medical Society. He succeeds Dr. E. C. Davis, Atlanta, deceased.

Dr. and Mrs. M. F. Haygood, Alto, entertained the members of the Habersham County Medical Society and the Woman's Auxiliary on March 6th.

INFORMATION

To our Members:

The Journal of the Medical Association of Georgia and the Cooperative Medical Advertising Bureau of Chicago maintain a service department to answer inquiries from you in reference to pharmaceuticals, surgical instruments and other manufactured products or anything you may need in your home, office, sanitarium, or hospital.

It is absolutely free and we invite you to use this service.

Perhaps you may want a certain kind of drug or instrument which is not advertised in the Journal and may not know just where to secure it most conveniently, or other things in connection with your home and practice. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in this Journal; but if they are not, we urge you to ask the Journal about them, or write direct to the Cooperative Medical Advertising Bureau, 535 North Dearborn Street, Chicago, Ill.

We want the Journal to serve you.

Books, surgical equipment and other supplies you need should be advertised in this Journal.

HYPERPARATHYROIDISM: CLINICAL PICTURE IN FAR ADVANCED STAGE

ARMAND J. QUICK and AWBROSE HUNSBERGER, JR., Philadelphia (*Journal, A. M. A.*, March 7, 1931), present a case of osteitis fibrosa cystica in which a large physiologically active parathyroid tumor was found and removed. The pathologic process had advanced to such a stage that some of the bones appeared to be almost completely demineralized. Before the onset of the symptoms the patient was a well developed youth, 6 feet tall, and weighing about 200 pounds. At the time of his admission to the hospital he was in fairly good health. Physical examination showed extreme deformity. With the exception of his head, hands and feet, every portion of his skeletal system was distorted and misshapen. The contraction deformities had reduced his total length to 45 inches from his original height of 70 inches. There was a pronounced bulging of the thorax, and both legs just below the knees were bent sharply outward, producing a typical frog-leg appearance. He was, however, relatively well nourished and had no cough, cyanosis or deformity of the chest. A parathyroid tumor was found, and after its removal marked improvement was noted.



Dr. Edward Campbell Davis

Dr. Edward Campbell Davis was born at Albany, Ga., October 11, 1867. He was graduated from the University of Georgia in 1888 and from the University of Louisville, School of Medicine, in 1892, beginning the practice of medicine in Atlanta the same year. For several years he was Chief Surgeon, with the rank of Major, of the Georgia National Guard, and served as such throughout the period of the Spanish-American War. President of the Medical Association of Georgia, 1910. Professor of Obstetrics and Gynecology in the Medical School of Emory University for many years. In 1917 he organized and turned over to the War Department, for Federal recognition, the Emory Unit (U. S. Army Base Hospital No. 43), and served as Executive Officer, with the rank of Major, later Lieutenant-Colonel, with the organization in France.

Co-founder and President of the Davis-Fischer Sanatorium. President of the Fulton County Medical Society, 1928. Fellow American College of Surgeons. He died March 11, 1931.

Whereas, God, in His infinite wisdom, has called to his eternal home our beloved friend, we feel that a deep bereavement has come upon us as individuals and as a society; that our city has lost an able surgeon; that our state has been deprived of a loyal citizen and a leader in the medical profession.

Edward Campbell Davis was a man of sober judgment and rare skill. He was fearless of criticism and steadfast in resolve.

He was a Christian gentleman and a sincere friend. His professional duty and love for his fellowman

always superseded personal gain. A man of rare fortitude whose spirit was never broken by prolonged suffering.

He was a teacher who lost himself in his work and inspired his students with the ambition to be well-rounded doctors, and, above all, good men.

He was ever ready to advise a friend in need and his opinion was invariably sound. He was truly the great friend and adviser to the young doctor and those who sought his council are legion.

In the midst of our mourning we remember with gratitude the loyalty, the earnestness, and self-sacrificing spirit of his services at all times to his patients, his fellowman, and to his country.

The events of his faithful service are eternally embedded in the memories of the medical profession of Atlanta and "inscribed upon the imperishable records of the age to which his name and labors gave luster."

Of him, we may say with the poet:

The dead are like the stars by day,
Withdrawn from mortal eye;
But not extinct, they hold their way
In glory through the sky.

For these noble characteristics his career is well known to us and his achievements have been a blessing to mankind and an inspiration to his confreres, therefore,

Be it Resolved, That the medical profession has lost a distinguished member and sincere friend, faithful to every commission, diligent to every trust, and noble in every purpose; that these resolutions be spread upon the minutes of this society and a copy be sent to the family of the deceased in token of our heartfelt sympathy in this hour of their bereavement.

ED. H. GREENE, M.D., *Chairman*;

TRIMBLE JOHNSON, M.D.;

T. P. GOODWIN, M.D.,

Fulton County Medical Society.

DR. FRED D. PATTERSON

Whereas, death has removed from the membership of our Randolph County Medical Society a fellow worker and friend, Dr. Fred D. Patterson, we submit the following as an expression of our sorrow in his passing and a tribute to his memory.

Some good men touch us and go on their way. Others touch us and afterward we never lose them out of our lives. By their fidelity and unselfish friendship they bind us to them with more than hoops of steel. Such a man was Dr. Fred Patterson.

We recall today a few of the qualities of his great mind and heart. He was gifted with a keen intellect, and in school and college and the after days, a tireless energy brought to fulness his native endowment, and he used it in the practice of his medical profession. He was not particular about pay, but freely gave his healing skill to those in need, the humble and lowly as well as the rich. This characteristic perhaps was his

most prominent virtue. He truly was prime minister to suffering humanity.

Other good qualities colored his life throughout—among them kindness, sincerity, unselfishness, loyalty. He loved people, consequently he was greatly loved. We think of him as the loved and loving husband, father, brother, friend. Truly "this was a man!" Our dear friend goes on, leaving to us a heritage of rich and blessed memory.

As members of the Randolph County Medical Society, therefore, be it resolved. That we offer this expression as a tribute to his memory, and as a message of deepest sympathy to his wife and three sons.

Resolved, further, That this tribute be entered on the records of the Randolph County Medical Society, and that a copy be sent his bereaved family.

E. C. McCURDY, M.D.,

F. M. MARTIN, M.D.,

A. L. CRITTENDEN, M.D.,

March 12, 1931.

Committee.

OBITUARY

Dr. Edward Campbell Davis, Atlanta: member, University of Louisville School of Medicine, Louisville, Ky., 1892; aged 63; died at a private hospital in Atlanta on March 11, 1931. He was born and reared in Albany, Ga., where he attended the public schools in early life and graduated from the University of Georgia, Athens, in 1888. Dr. Davis served in the Spanish-American War with the Second Georgia Volunteer Infantry as major and surgeon. He organized what was known as the "Emory Unit" of medical men for service in the World War, and served with the A. E. F. in France. Dr. Davis was one of the founders of the Davis-Fischer Sanatorium, which has recently been reorganized under the name of the Crawford W. Long Memorial Hospital and Clinic. He was widely known as a surgeon by the medical profession and others knew him as a man of an engaging character and remarkable personality. Dr. Davis was a member of the Fulton County Medical Society, American College of Surgeons, and the American Medical Association. He was past president of the Medical Association of Georgia and, at the time of his death, was chairman of the board of trustees of the Fulton County Medical Society, and professor emeritus of gynecology of Emory University School of Medicine. Surviving him are his widow, five daughters, Misses Catherine, Marie, Theodora, and Sarah Davis, all of Atlanta, and Mrs. Frederick Marks, Rome; three sons, Dr. Shelley C. Davis, and Robert Carter Davis, both of Atlanta, and Lieutenant E. C. Davis, Jr., Selfridge Field, Mich. Funeral services were conducted by Rev. Richard Orme Flinn from the First Baptist Church. Interment was in West View Cemetery.

Dr. Thomas L. Arnold, Kingston: age 82; died suddenly at his home on March 3, 1931. He was one of the oldest citizens of the village. Surviving him are his widow and one brother. Funeral services were conducted by Rev. Amos Cash from the Baptist Church. Interment was in Oak Hill Cemetery.

Dr. Augustus Wesley Wright, Rome: New York University Medical College, New York City, 1876; age 81; died at the home of a friend, 5 West Seventh Avenue, Rome, on March 11, 1931. He had practiced medicine in Floyd county for a number of years, but had been inactive in recent years.

Dr. William Torrance Jones, Atlanta: member, University of Georgia Medical Department, Augusta, 1890; aged 61; died suddenly at his home, 181 Rumson Road, Atlanta, on March 18, 1931. He was a native of Augusta and moved to Atlanta twenty-seven years ago. Dr. Jones had been an active practitioner until recent months when his health began to fail. He was a member of several secret orders, the Fulton County Medical Society, the American Medical Association, and the Ponce de Leon Baptist Church. Surviving him are his widow, two daughters, Misses Elizabeth and Estelle Jones; one son, William T. Jones, Jr. Funeral services were conducted by Dr. L. R. Christie from the chapel of Awtrey & Lowndes. Interment was in Crown Hill Cemetery.

Dr. William G. England, Cedartown: member, University of Alabama School of Medicine, Tuscaloosa, Ala., 1874; aged 88; died at his home on March 26, 1931. He was born in Marion, Ala., and moved to Cedartown in 1876. Dr. England had been actively engaged in the practice of medicine for thirty-five years. He was one of the most prominent physicians in Cedartown and vicinity. Dr. England was active in both church and civic affairs and was a member of the board of education at the time of his death, and a director of the Masonic Home at Macon. He was a member of the Polk County Medical Society and the American Medical Association. Surviving him are his widow, one son, William G. England, Jr., of Atlanta; three daughters, Mrs. Andrew S. Hester and Mrs. Marie Gudgell, both of Atlanta, and Mrs. Sydney Brough, Los Angeles, Calif.

Dr. Lester A. Mallicoat, Trion: member; University of the South Medical Department, Sewanee, Tennessee, 1897; aged 56; died at his home on December 2, 1930. He was a prominent physician and had enjoyed an extensive practice in his home town and surrounding community for years.

ROLE OF STATE HOSPITAL IN MENTAL HYGIENE

J. ALLEN JACKSON, Danville, Pa. (*Journal A. M. A.*, March 28, 1931), cites facts that warrant the following conclusions: 1. The mental hospital can be made one of the keynotes of the mental hygiene movement. 2. It has and always will play a definite role in research and treatment. 3. Its clinics and educational activities are two of the greatest forces in carrying the doctrine of prevention. 4. It lends its broad arms to medical education. 5. It is one of the greatest mediums for public enlightenment. 6. All of which may be done with satisfaction, peace and harmony in its many related fields.

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THE FOE OF YOUTH

During the month of April every high school in Fulton and DeKalb Counties is participating in a great nation-wide campaign against tuberculosis in the teen age, as planned by the National Tuberculosis Association. The Atlanta Tuberculosis Association supplies the literature to these schools as a part of its educational program.

Youth's strongest weapons are freedom from physical defects, as infected tonsils, teeth, etc., at least nine hours of rest and sleep; plenty of good wholesome food, and exercise in the fresh air and sunshine.

If every high school boy and girl would decide today to buckle on his armor, Goliath would speedily be defated.

The Atlanta Tuberculosis Association, at 286 Forrest Avenue, N. E., stands ready to help every high school boy and girl in Fulton and DeKalb Counties with advice and a free physical examination if anyone is unable to pay a doctor. This work is carried on by funds from the Community Chest, tax money and the Christmas Seals.

MILDRED S. MANSON,
Director Health Education,
Atlanta Tuberculosis Assn.

DRUG ADDICTS

Drug and Alcoholic patients are humanely and successfully treated in Glenwood Par Sanitarium, Greensboro, N. C.; reprints of articles mailed upon request. Address W. C. Ashworth, M.D., Owner, Greensboro, N. C.

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PUSHING BACK THE FRONTIERS*

G. Y. MOORE, M. D.
Cuthbert

Some years ago there existed in New York what was known as the Kindred Club. It was composed of the best known men in the city. Richard Croker, Henry Ward Beecher, Brander Matthews, Edwin Booth, Joseph Pulitzer, Joe Jefferson, and others. One night as the little group sat talking, Booth, turning to Jefferson, said: "Joe, had you noticed that we are the only people in the room except one man? He is an intelligent looking gentleman, sitting all alone. Why don't you invite him to join us?" "I will," said Jefferson. Going to the stranger, he said, "Pardon me, sir, that group of gentlemen over there is discussing music, art, and literature, and we would be very glad to have you join us." "I will be delighted," replied the man, and followed Jefferson over to the table. "Now, I will introduce these men to you. This man on my right is Joseph Pulitzer, editor of the *New York World*. This is Brander Matthews, the writer; the next man is Ward Beecher, the Brooklyn preacher; next to him is Edwin Booth, the actor; the next is Richard Croker, of Tammany Hall; the next is John L. Sullivan, and I am Joseph Jefferson, the actor. Now who are you?" "Well," answered the man, running his hand over his chin, "I am Napoleon Bonaparte, but you birds are too drunk for me, and I am going home." When I looked over the program and saw all of those big names, instead of making a speech, I felt like going home.

The formality of bringing the presidential address relieves the speaker of attempting to say something in a startling or unusual way, realizing that we are a group of kindred spirits. A man was making an address in a

large hall, and a man in the rear called out, "Louder"! The speaker paid no attention to him. He went on with his address, and again the man hollered, "Louder"! The speaker went on, and again the man arose and hollered, "Louder"! A man in the front got up and looked at the fellow in the rear and said, "Can't you hear him back there"? "No, we can't". "Well, you ought to be thankful. Sit down". So, now let us approach our subject.

In a poetic mood Walter Malone said, "At sunrise every soul is born again," which was an emphatic way of stating the eternal fact that man is a natural born adventurer. We have a way of thinking of the Norsemen, the Columbuses, Pearys, the Forty-Niners, and forget every man who has made a real contribution to the race set out on a pioneering expedition, pushing over plains, rivers, and mountains, led by the mystic power of thought. I like these lines:

All things come to him who waits,
But here is a rule that's slicker;
The fellow who goes after what he wants
Will always get it quicker.

Which is just another way of saying that genuine manhood's mettle is constantly being tested, and whatever the hardship there is a strange fascination to endure it for the rare privilege of looking on the hitherto unknown just beyond the horizon's rim. It calls for the Joan of Arcs, the Garabaldis, the Washingtons, the Wilsons, and hosts of others who are the plumed knights of the race.

One of the most fashionable words at present on the lips and printed page is "thrill". The seats are all taken at the movie because of a thrilling picture. The leading novels are those that give us the greatest thrills. How people pack the grounds at ball games and prize fights in order to get thrills. It is a common-place word, but it is the word

*Presidential Address delivered before the Medical Association of Georgia, Atlanta, Ga., May 14, 1931.

that describes that everlasting thirst for the unattained. The world of material things is wrapped about with strange coverings and labeled "Mystery". And in the midst of it all man moves, the master of the forces which he has released, and still dreams of a world where, in the noblest way, his efforts shall contribute to the happiness and well-being of the largest number of human beings. That objective should "thrill" us as we increasingly realize our universal obligation.

Some centuries have constellations of intellectual leaders, brilliant in achievement, who are a perpetual glory to the land and age which produced them. The characteristics of our age, and especially of our profession, is the rapidly increasing number of men who covet not a place in the sun, but the place of honor—to be servant of all. The adventurer, who, after all, is the true servant, is continually reminded that the island of uncertainty on which he stands is lapped by seas of mystery, and

God's seas are wide
And our boats are small.

We talk of atoms and molecules, and a new word, more infinitesimal still, has come into vogue in the "electron". These are the allurements along the pathway of knowledge, the challenge to pry into the secret vaults for rare treasures, treasures that will evermore enrich the race of which we form a part. From time to time we have been struck dumb with the discovery of unusual and powerful forces hidden through the ages. The fact is, every blessed day we pitch our tent a little nearer the last frontier.

Mr. Wannamaker once said: "It is not extraordinary circumstances, nor rich friends, nor large capital that create the golden opportunities of life. It is the something in the person that thinks." Thinking starts things. It is either constructive or destructive. Constructive thinking is co-operative and service-rendering. If my many years in the practice of medicine have taught me anything at all, they have conclusively indicated that we are only beginning to tap the potential powers around us. Raamur spent his life thinking about wasps, and today we have a great pulp-paper industry, without which modern news-

papers would be impossible. Goodyear, in 1839, thought out a way to vulcanize rubber, thus paving the way for our great rubber tire industry, without which our automobiles would be slow moving machines. The onward march in our industrial world is indeed a fascinating story when we realize that the credit is due our thinkers.

But, as we scan the field of medicine, from the first recorded data to the present moment, we witness achievements unparalleled in all other human activities for the blessing of mankind. It must be apparent to the most superficial that we are in the midst of accomplishments not dreamed of even a decade ago. In science, new discoveries follow each other with bewildering rapidity; the miraculous application of the discoveries of yesterday form the scrap-heaps of today; in manufacture, individual ownership and workmanship give way to mass production and collective ownership. We have a special right to be proud of the role we have played. No other profession or group has so co-ordinated and brought to mankind the benefits of all the sciences, the rich gifts of our knowledge in physics, in chemistry, in physiology, as has that profession which we represent. However, there is yet much to be done.

The foreword, by Dr. Wilbur, to the White House Conference, is certainly arresting to the discerning mind. He says, "Civilization has gone forward with a sudden spurt since it began to use science as the basis of its agriculture and industries. Medicine has advanced with equal strides, but there has not been even distribution of the benefits of all that we have learned to the children of our country. There is a duty that maturity owes to youth which can only be carried out by the fullest use of existing knowledge. The Conference must not only gather information, but must develop methods for communicating it to those in every part of our country, so that all interested and informed citizenship will unite in the solution of the many problems of childhood. Through our own endeavors we have changed and moulded the environment of our children. They need guidance so that they will prosper instead of suffer. We must deliberately plan for the steps that lie just ahead." To me, these are weighty words, for they involve special con-

sideration of pre-natal and maternal care; public health organization; control of communicable diseases, prevalent among children; social and mental hygiene. The children of our nation look to us for the promotion of a worthy and positive program, designed to inculcate physical and mental health habits which result in sustained bodily vigor, physical and mental health, continued individual and social efficiency and happiness. Every child is entitled to, and should receive, periodic health examinations, before and during school periods. They should have instructions in the schools in health and in safety from accidents, proper sleeping rooms, diet, hours of sleep, some form of religious, moral, and character training.

We have a common aim, which is to prepare the American children physically, mentally and morally, more fully to meet the responsibility of tomorrow than we have been able to meet that of today. How are we to meet the pressing difficulties before us in dealing with forty-odd million children? In general, I think I have indicated already the lines of procedure, which, if rigidly followed out, will guarantee these little toddlers at our heels a better chance than we have had.

It is the opinion of the Committee on Federal Health Organization that the Federal Government, through the State Health Departments, should supply to the various states, in proportion to their needs, the personnel and money necessary to guarantee to every community in the nation a health service that will be able to maintain at least what the authorities may designate as a recognized standard of adequacy. The state and local health departments should advise with the medical and dental professions in determining programs. The state medical and dental associations should appoint, for the benefit of the state health officers, advisory committees, approved by their legislative bodies. Likewise, the district, or county organizations, should appoint advisory committees for local health officers. This co-ordination of effort will prove a very important factor in safeguarding the health of the child, as well as the general public. Will Rogers has a wholesome philosophy, which he dispenses generously on all occasions, and on all subjects. Here is a bit that is apropos, "I am

mighty glad so many people are taking up the children's work. Being a ranchman and farmer, and also a child owner, I have often wished that when one of my children got sick I could call or wire some expert and have him come look after them. Like I can do if one of my cows or pigs gets some disease. It's not a bad idea that the doctors thought of doing something for them. If it works, and you improve them, I will send you mine." This word of Mr. Rogers for better care of our children suggests the pathetic yearning of vast numbers who are waiting for our help, which we will ungrudgingly give.

In addition to the observations already made, we must not overlook the importance of Preventive Medicine, which is largely a development of modern times. From the inscription and folklore of primitive people it is clearly indicated that disease was thought to be a visitation from the gods. At the same time, some very real contributions were made to preventive medicine by the ancient civilization. Unfortunately, much of the progress made at this time was lost to humanity in the middle ages. During the seventeenth and eighteenth centuries, gradual progress was made in sanitation and hygiene. Preventive medicine, as we know it today, received its real impetus in the nineteenth century, and its greatest development has taken place during the last fifty years, or within the memory of living men. When the man, whom all the world proclaims its great apostle of preventive medicine, was growing up in Norfolk, Conn., he gave few indications of the fact that in a few decades presidents and kings, learned societies and unlearned laymen in thousands would take delight in honoring him. The great assemblage, which met some time ago in Memorial Hall in Washington, marked a milestone without a parallel in medical history. Synchronizing with the public tribute in our capital to Dr. William Henry Welch, there were gatherings of grateful people in the great cities on every continent. Today, from Afghanistan to Argentina, from America to India, the pupils of Dr. Welch keep watch and ward over the health of the world. In his international campaign the doctor has brought into close kinship fifty nations. He has established a union to combat disease and to improve the common lot,

which neither party politics nor tariff squabbles can disturb. A quotation from him will help us to visualize in some measure the scope of the work accomplished by him. He says, "The past fifty years have witnessed revolutions in medicine. Our new knowledge, painfully acquired, enables us to control the spread of many diseases. Cholera, yellow fever, diphtheria, bubonic plague, typhus, and malaria cannot ride roughshod over us as they used to do. But some of our old enemies are still with us in the ring. For instance, the diseases of the respiratory type, pneumonia and influenza. The splendid young fellows who are taking up the torch and the scalpel, and above all, the lenses, will have to contend with foemen worthy of their steel."

Romance! Not all, but sober fact, as we can all testify here today. Preventive medicine combats the intruder at the door, challenges his right of entrance, denies him footing, and claims possession on the ground of title of entry. Herein is suggested the principle of the present revolution in the practice of medicine; the idea not being to destroy the germs of disease, but to fortify the constitution against them; to make the organism exempt, to establish a power of resistance. The strategy of medical science today is better hygiene, the putting of the body above par, and so conferring immunity from attack. What marvelous advances have been made in pathology, through the ministry of precaution. For instance, puerperal fever, that scourge once so fatal to motherhood, or diphtheria or tetanus, or cerebro-spinal meningitis. And speaking of the protozoan type of disease, a scientist of note has recently claimed that if the mosquito theory of yellow fever had not been established in 1900, the Panama Canal could never have been built. Dr. Osler says, "There is nothing to match it in human achievement."

If medical science had sat down in a spirit of week-kneed resignation and accepted disease as an uncontrollable visitation of Providence, we should still have them with us. This is not the spirit of modern science. It girds itself with painstaking research to find the nature and origin of disease and to devise methods for its prevention. Thus are we steadily pushing the frontiers back and making a better world in which to live.

And, now this appears to be the logical juncture to say something briefly on Periodic Health Examinations. The present program and propaganda, which, in its general conception, applies in large measure to the adult population, marks a distinct advance in community health protection, and should be furthered and fostered to the limit of its capacity. We are dealing here not with a theory, but with a condition which must be faced and met. We should look ahead and give to the community of the future, more virile, a far less handicapped and a sturdier manhood and womanhood than what exists at present. In 1922 the American Medical Association Bulletin strongly emphasized this work. In the same year the House of Delegates took formal action, endorsing the principles, and appealing to physicians generally to equip themselves to meet the demands of the public for such examinations. Much has yet to be learned in this field, but enough is known to make the practice of frequent examinations one of the most important fundamental measures, not only for the protection of the public health, but for the building up of the vitality and capacity for living well, in the broadest sense of the term. The Scripture asks the question, "How much better is a man than a sheep"? What is our answer?

You talk of your breed of cattle,

You plan for a higher strain;

You double the food of the pasture,

You heap up the measure of grain;

You draw on the wits of the nation

To better the barn and the pen,

But what are we doing, my brothers,

To better the breed of men?

Briefly I have called your attention to the results of modern medicine, as it affects life from its beginning in the cradle up to, say, sixty years. What have we to say about the "span" of life? Nothing has happened to encourage the hope that the span of life might be lengthened despite extraordinary improvements in the field of medicine within the last century. Man has always sought to lengthen his days. Because life is the most desired thing in the world, an unrelenting urge has spurred the perennial quest for the Fountain of Youth. Every land and every era has had its Ponce de Leon. Today, more

urgently than ever, the quest goes on. Has the ability of man to live longer changed? Are there larger numbers of centenarians? What is the likelihood of an extension of life span in the future? Relatively few people live to extreme old age. Granted that a few people do pass the century mark, there is apparently no authentic information that any one ever attained an age much greater than 110 years. Authentic centenarians are so few in America that they can be counted on the fingers of one's hands. The words of the Psalmist "The days of our years are three score years and ten; and if by reason of strength they be four score years, yet is their strength but labor and sorrow; for it is soon cut off and we fly away," were based on keen and accurate observation and are as true today as they were then. For the great majority of people, the practical limit to the life span is eighty years; for only six out of one thousand reach or pass this goal. As far as available evidence goes there has been no change in potential longevity throughout the entire period of human history.

Little evidence, if any, exists that the eugenic movement is able to add materially to our life span, because unfortunately we know all too little about heredity. The gains accruing from a public health program, as we have already shown, are clearly in the direction of curtailing mortality in the early ages only. There is no recently discovered technic that gives us any appreciable power to combat the hazards of middle life and old age. It is therefore not surprising that in spite of increasing knowledge, and improving medical practice, the mortality from heart disease, from cancer, and diabetes is constantly rising. Even where a definite specific has been discovered, such as insulin, its effectiveness seems to be limited to the younger ages, for after middle life the trend of the death rate from diabetes is distinctly upwards. We seem, in fact, to be confronted at the older ages with the gradual breakdown of the human organism. Apparently the human body, like the machine in industry, has a fairly definite working life, and each year of activity produces a certain amount of depreciation. When all has been said and done about personal hygiene, periodic health examinations, and rejuvenation, we are still confronted with the

stern fact that apparently no way is yet in sight to keep the heart functioning beyond a rather distinctly fixed number of years. Like the wonderful one-horse shay, the human mechanism, even when it survives to hale and hearty old age, is apt suddenly to go to pieces and break down all at once, because the heart quietly stops functioning.

But after all, is it not vain to complain that we cannot extend indefinitely the term of our life? Within the space of a century, or even the more practicable period of eighty years, cannot man attain the fulfillment of every reasonable ambition? Instead of harassing our minds with the futile desire for added years at the dusk of life, should we not in a spirit of peace and submission face facts as they really are? A period of old age free from the pain and the hardships of earlier years, serene and calm in the possession of one's mental faculties, is most beautiful, but it should be enjoyed in the untroubled realization that the final scene in the drama of life will necessarily be short.

It is our hope that an ever greater proportion of people will be enabled to utilize all their productive years, arrive at the threshold of old age, and ever live well beyond into the fullness of years.

In our sphere of action we have toiled up and on, through sunshine and rain, in joy and sorrow, in season and out of season, to push back the frontiers so that we might have a better and happier world in which to live. Let us all continue to nobly play the part of a friend.

Let me live in a house by the side of the road,

Where the race of men go by—

The men who are good and the men who are bad,

As good and as bad as I.

I would not sit in the scorner's seat,

Or hurl the cynics ban;—

Let me live in the house by the side of the road and be a friend to man.

I see from my house by the side of the road,

By the side of the highway of life,

The men who press with ardor of hope,

The men who faint with strife.

I turn not away from their smiles nor their tears—

Both parts of an infinite plan;

Let me live in my house by the side of the road and be a friend to man.

THE DUTY AND NECESSITY FOR CHILD WELFARE WORK*

G. Y. MOORE, M.D.†

Cuthbert

Members of the Womans Auxiliary,

Ladies:

It was one year ago this month that I stood as President-Elect of the Medical Association of Georgia and had the honor of addressing you, the wives of Georgia doctors, on the subject, very close to our hearts always—the health and welfare of Georgia's children. I have been strongly impressed with the feeling that, perhaps, as no other organization in the state, you are ideally capacitated just at this time to give, within your local communities, the leadership so necessary for the accomplishment of a state-wide program, whose object is the correlation and co-ordination of the various forces, whether actively or potentially existant in every community, working for the happiness and protection of childhood. I urged you a year ago, and today I come with the same earnest appeal, that, as wise far-sighted, educated women you turn your auxiliary activities toward perfecting local machinery in your home counties for the betterment of conditions for all little children within your borders.

During the year that has just passed, I have come into close, personal contact with many of the outstanding leaders in this service to children in Georgia. Through them, as a member of the Medical Section of the White House Committee on Child Health and Protection, I have been brought in touch with the broader national forces of this same service. I would that I could so address you today as to lend you the inspiration and the enthusiasm for this work that my contact with these men and women has given me throughout the year, and send you back to your home communities fired with a determination to do your part toward interpreting to the public there the truths that can today best guide those communities into well planned programs for the highest development of our future citizenry.

There is today, in America, as never before, a public consciousness that there are safeguards and services to childhood which are community responsibilities beyond the reach of the individual parent. Far be it from me to minimize or undervalue the responsibility, or the competence, of that greatest of all forces for happy childhood—the sacred, spiritual force of loving motherhood; but, always granting that, as thoughtful men and women, we cannot fail to recognize the fact that in the complexity of life, as it exists around us today, there are many things which the watchfulness of the most loving mother can not compass, whose supervision and control are beyond any individual mother's power. She cannot count the bacteria in the milk, or detect the typhoid that comes through the faucet, or the mumps and measles that pass around the school grounds. She cannot alone control the amusements and recreations that modern conditions reach out to allure our youth. She would if she could. Given half an opportunity to know what should be done about such things, having a standard set which she knows is right to follow, she will go about accomplishing that standard, I believe with as wholehearted zeal as her grandmothers used in rocking their babies, or applying to their boys the chastening rod. *To set such standards* within your communities of Georgia, the leadership which such women as you can furnish, is the imperative need today.

President Hoover, in his opening address at the Third White House Conference, last November, said, "These questions of Child Health and Protection are a complicated problem, requiring much learning and much action. Let no one believe that they are questions which should not stir a nation; that they are below the dignity of statesmen and governments. If we could have but one generation of properly born, trained, educated, healthy children, a thousand other problems of government would vanish. We would assure ourselves of healthier minds in more vigorous bodies to direct the energies of our nation to greater heights of achievement."

That we need to work for improvement among the handicapped, defective, delinquent children of America, the following figures strikingly show. The White House Com-

*Address before the Woman's Auxiliary, Atlanta, Ga., May 13, 1931.

†President of the Medical Association of Georgia.

mittee on Medical Care reported at this conference in Washington last November, that out of 45,000,000 children

- 35,000,000 are reasonably normal
- 6,000,000 are improperly nourished
- 1,000,000 have defective speech
- 1,000,000 have weak or damaged hearts
- 675,000 present behaviour problems
- 450,000 are mentally retarded
- 382,000 are tuberculous
- 342,000 have defective hearing
- 18,000 are totally deaf
- 300,000 are crippled
- 50,000 are partially blind
- 14,000 are totally blind
- 200,000 are delinquent
- 500,000 are dependent

This presents a total of at least 10,000,000 deficient children in America, eighty per cent of whom are not receiving necessary attention, and many of them suffering from troubles that, if given proper attention, could be prevented and remedied to a great extent.

It was to study ways and means to help these deficient children of the nation, as well as to stimulate and protect the normal child, that Mr. Hoover organized the Third White House Conference for Child Health and Protection; and the 1,200 earnest men and women who have made up the membership of this conference have literally given themselves to the task of looking into the conservation of our national offspring, finding out where our conservation needs guidance and how we can best strengthen our present measures, as well as formulating wiser ones for the future. In a brilliant address the closing night of the conference, Miss Martha Van Rennsler, of Cornell University, summed up the objectives of this work in the following sentences: "From coast to coast the White House Conference has caught the imagination of our people. This is because it strikes at the very fundamentals of living, because it concerns itself with both the immediate improvement of adults and children, as well as with plans for the coming generations, in whom are centered the fondest hopes of parents and the nation. It presents the problem of the whole human race; the child unborn, the child in arms, the child in school, not yet ready for earning and homemaking, and the great mass of our youth. *But most of all, it is for those whose work it is to prepare young people for the responsibil-*

ities of homemaking, child bearing, and citizenship. The goal toward which we aim is not new. It is merely a new way of doing old things. Its foundation is the Golden Rule. The Golden Rule may not say, protect children from communicable disease, take care of mothers at childbirth, secure pure milk and water, **help humanity** to adjust itself rather than increase crime, delinquency, and dependence, take care of the child limping a little in the race with a handicap—but, when it says love your neighbor as yourself, in these modern times, it means these things. Within the past decade in America there has been a growing consciousness of the significance of childhood. We have seen service to childhood, which was once charity, change its nature under the broader term of welfare, and now these activities, looked upon formerly as welfare, are coming to be viewed merely as good community housekeeping. The word parental responsibility is moving outward to include community responsibility. Every child is now our child. We want to prepare this American child physically, morally, to more fully meet the responsibilities of tomorrow than we have been able to meet those of today."

Ladies, if there are from three to five million children in the United States today who are handicapped, in the ordinary sense of the word, namely, children who are blind and partly seeing, who are deaf and hard of hearing, who are crippled, who are mentally defective, or suffering from tuberculosis, heart disease, or parasitic diseases, the problem of these children is *ours*, if we are to meet our parental responsibility in this larger sense of community parenthood and fulfill the Golden Rule.

Today, as never before in Georgia, the opportunity awaits such leaders in the various counties as you can supply. Following the organization of the White House Conference, Georgia has organized her own Council for Child Health and Protection; the State Board of Health is working as never before to bring about a more practical working district plan of supervised health work; the State Board of Public Welfare is striving to its utmost to co-ordinate in all local communities the existant forces for Child Welfare, Education, Health, Protection; the department of edu-

cation is co-operating; the College of Agriculture is lending its aid toward betterment of industrial and economic conditions;—But, unless there is within the local community itself local interest, local leadership, local co-operation, the great aims and purposes of our various state agencies will be thwarted and held back. It is for you to lend your zeal and enthusiasm toward the arousing of such local co-operation that I appeal to you today.

Someone has said, "Humanity may readily be divided into three classes: There are those few who make things happen, the many more who watch things happen, and the overwhelming majority who have no idea whatever of what is happening. Every human being is born into this third and largest class. It is for himself, his environment, and his education to determine whether he shall rise to the second class, or, better, to the first." It gravely concerns every educated, intelligent, loving woman in Georgia today to know just what things are of primary importance to be done for our children, what things are being done, what relation the situation and its proposed solution have to her own community and what her individual responsibility is to encourage influences that are good, to oppose those that are not. The handicapped, dependent, **even the delinquent child** himself, is not the prisoner at the bar of justice, but rather it is Society itself that is being tried.

America was founded on the great impulse to secure freedom and independence for our forefathers and their descendants. Freedom today has come to mean more of the spiritual than governmental or religious—a freedom which gives opportunity to every individual to reach the full capacity of his abilities and character. May you go home to your home communities in Georgia, and there lend your influence toward the opening of new doors to all little Georgia children, and lighting a torch that, like the sun's rays, will bring to blossom their full potentialities and powers.

ADDISON-BIERMER'S ANEMIA (PERNICIOUS ANEMIA)

I. W. Held and A. A. Goldbloom, New York (*Jour. A. M. A.*, April 25, 1931), report the case of a patient having Addison-Biermer's anemia who developed unusual phenomena in the course of treatment with liver extract.

PULMONARY SPIROCHETOSIS*

HENRY L. LEVINGTON, M. D.
Savannah

In May of last year I was called to see a patient who was critically ill. He had been examined by a doctor a few days before, who pronounced his case one of advanced tuberculosis. The doctor advised him to go West as quickly as possible. When I saw the patient, he was prostrate, having septic chills and fever, profuse sweats, and a hacking cough. The cough was productive of a foul smelling muco-purulent and blood streaked sputum in a large amount. He had lost thirty pounds in weight in the past few weeks. He gave a history of profuse pulmonary hemorrhages a few days before. Examination of the chest revealed suggestive physical signs. The picture was certainly one of advanced pulmonary phthisis, but many consecutively examined specimens of sputum were negative for tubercle bacilli. The X-ray examination did not reveal the serious pathology anticipated. It was only after this examination that I suspected a fungus or spirochetal infection, and when the sputum was again examined with this in mind the organisms of Vincent's angina were found in preponderately large numbers. Examination of the pharynx was negative for Vincent's.

Upon consulting the literature I found that in practically every case reported the observers were confronted with the same picture, namely, of a clinical picture of advanced tuberculosis; but in which the radiographic findings were not characteristic, nor could tubercle bacilla be found in the sputum.

Before taking up pulmonary spirochetosis as a clinical entity it might be well to review briefly the bacteriology and pathology. The frequency with which the infection occurs in the throat has led observers to give it a varied nomenclature, such as Vincent's angina, Plaut-Vincent angina, Ulcero membranous angina, and finally Trench mouth.

However, since the organisms attack regions very remote from the pharynx, such as the vagina, glans penis, prepuce, middle ear, lungs, brain and meninges, it seems the term

*Read before the Medical Association of Georgia, Augusta, Ga., May 16, 1930.

fuso-spirillosis suggested by Creighton Barker is much more applicable and appropriate.

Historically it is quite possible that the first microscopic organism to be observed by man was the spirillum of Vincent. Certain it was that in 1683 Leeuwenhock with his crude lenses, before the day of the modern microscope, described a spirillum which he obtained from plaques of tartar from the teeth, which if not actually the spirillum of Vincent, was unquestionably an allied organism. Fuso-spirillosis has always been a cause of morbidity in various wars. It had a wide spread prevalence during the American Civil war and the Franco-Prussian war. During the late European war the infection was pandemic among the expeditionary forces, as the so-called Trench mouth, which was an ulcerated Gingivo-stomatis. I will not go into a description of the fusiform-bacilli and the spirillum of Vincent as lack of time will prevent. However, it is of more than passing interest to note that while the two organisms are entirely dissimilar in form and size, some observers believe that the spirochetal forms are simply early stages in the life of the fusiform bacillus. This conclusion, however, is denied by Zinsser.

As to the habitat of the organism; while it is generally known that the organisms are frequently present in relatively large numbers in carious and ill-kept teeth, dirty mouths, and tonsils, the figures of Miller and Epstein are astonishing. They found the spirillum present in 77 per cent of apparently normal mouths, and the fusiform bacilla in 92.5 per cent. Pilot and Davis report their presence in 82 per cent of 100 pairs of excised tonsils. While these facts are more or less generally known, what is not generally known is their presence in other localities of the body. Gifford reports their presence in meibomian glands; Brams and Pilot found them in 51 per cent of preputial secretions of normal males; Davis and Pilot in 60 per cent of smears made from the material around the clitoris.

It is only recently that the spirochete has been given any attention as a possible factor in pulmonary diseases. Castellani is given credit for the first description of this disease. In 1906 he described a group of cases

in Ceylon, which while clinically resembling tuberculosis, gave negative laboratory and roentgenologic findings. He demonstrated spirochetes in large numbers, which we called specifically "Spirochete bronchialis." This organism differentiated from the Vincent's organism in that no mention is made of the finding of fusiform bacilli. At first it was thought to be distinctly a tropical disease, but sporadic cases in various parts of the world appeared until now it is conceded to have a practically universal distribution. The first cases on record in the United States were those reported by Johnson of Mississippi in 1909, and by Rothwell in Missouri in 1910. Their cases presented similar symptomatology to those of Castellani, but with the difference that besides the spirochetes, the fusiform bacilli were also found, and hence they gave their cases the name of Bronchial Vincent's angina. Only 107 cases of all types had been reported up to 1927 in this country, which attests the scant attention given to the disease.

Considerable discussion has arisen concerning the specificity of the organism. Castellani claims that the organism he described is a specific one, inhabiting only the deeper air passages, and adduces certain characteristics to differentiate them from the spirochetes of the mouth and throat. In his original work he divides the organism into four groups according to their length and the number of undulations. Its most marked characteristic is an active motility which, however, lasts only one hour after removal from the body. It stains readily with aniline dyes and spirochetal stains. It is polymorphous and varies in length from 30 to 30 microns and in breadth from .2 to .6 microns. Its ends are blunt or sharp and the number of undulations vary from two to eight. Whether Castellani's organisms and the organisms of Vincent are the same or dissimilar are questions for the bacteriologist and pathologist to fight about—not me.

Although most of the cases of fuso-spirochetal disease reported have been sporadic, at times the infection may be traced from patient to patient. Bruce in a January issue of the journal of the A. M. A. reported two cases in physicians, who developed the disease

while treating patients with Vincent's angina of the throat. Both of these physicians contracted Vincent's angina of the throat and subsequently spirochetosis of the lungs. Spirochetosis of the lung does not necessarily occur as a complication of the pathogenic lesion, but may be primary in the lung itself. The case I will report at the end of this paper will indicate this.

Recently Chevalier Jackson studied with the aid of a bronchoscope a case of infection of the bronchi following a case of pharyngeal Vincent's disease. From smears made through the bronchoscope of deep ulcers in the bronchi he obtained Vincent's organism in pure culture. Several other competent observers have reported complications ranging from bronchitis and bronchial pneumonia to more serious complications of lung abscess, empyema, gangrene, and even death.

The period of incubation is from one to five days. The symptomatology and signs of the disease depend, of course, on the variety of the pathology observed. In the acute uncomplicated cases the symptoms and signs are similar to those of the acute lung infections, such as pneumococci, streptococci and other pathogenic organisms; that is, fever, headache, stiffness and aches in back and limbs, and so forth. The expectoration, clinical signs and symptoms vary as the lesion is one of simple bronchitis, broncho or lobar pneumonia, empyema lung abscess or gangrene. In the uncomplicated cases, if they are recognized early, and proper treatment instituted, before much destruction of lung tissue has occurred, the disease responds quickly and may subside in from ten to twelve days. Frequently, however, relapses occur and cases may become chronic, running on for months. Castellani reports one case lasting six years. In the relapsing cases the original pathology may eventuate into the graver conditions mentioned above. The treatment par excellence in these cases is the judicious use of arsphenamin in one or another of its forms. Most observers consider this a specific, if administered early in the course of the disease.

CASE REPORT

Patient D. G., aged 25; 6 ft. 3 in. tall; weight 235. A railroad flagman who had enjoyed excellent health all of his life except for the usual childhood diseases. He was transferred by the railroad company to Quincy,

Florida, in January, 1929. Five months later, that is, on May 15th, he fell ill, complaining of pain in head and neck, cough malaise and chilly sensations. He had taken calomel the previous night, because, as he said, he "had been feeling bilious for several days." Feeling no better during the next two days he consulted a local doctor who diagnosed his case as malaria and gave him capsules, presumably quinine, to take four times daily. However, he continued to have chills and two days later went to bed with high fever. He weighed the day before going to bed, and found that he had lost thirty pounds. This loss of weight had not bothered him, however, because he believed himself overweight and had been dieting to correct it. Three days later, that is, on the night of May 22nd, he had a profuse hemorrhage, and the doctor gave him a hypodermic, but his sputum remained blood streaked. His parents were summoned, and brought him back to Savannah on May 26th. I saw him the next day, May 27th. The patient had the typical Hippocratic facial expression and was bathed in a profuse perspiration. He had a hacking cough and was expectorating a thick, greenish muco purulent secretion. The sputum had a fetid odor, but no blood appeared in about four ounces of expectoration which was saved by the nurse for me to see. Temperature 103 2/5, pulse 130, respiration 22, tongue furred but clean, mouth and pharynx negative. No ulcers were seen upon close examination of throat and tonsils. I mention this because later, during his convalescence he developed a severe ulcero-membranous stomatitis, which was loaded with Vincent's organism. Physical examination of chest revealed very little definite findings. There were some moist rales, scattered over various areas of the lungs, but no definite areas of dullness of cavity formation. This was puzzling, because the history of the case suggested either a severe acute pulmonary tuberculosis or a lung abscess. Late that afternoon I saw him again. His temperature was 104 2/5 and he was still coughing up this fetid expectoration. The next day a blood examination was made, as follows: W. B. C. 12 200; H. B. 60%; R. B. C. 4 100 000. The differential count showed 78% polys, 18% lymphocytes, 35 transitional, 1% eosin. The blood was negative for Weil-Felix and Widal reactions. Sputum negative for tuberculosis. Urine showed 1 plus albumen, few pus cells cut no casts. Smears for malaria and tuberculosis were negative. Temperature that day ranged from 100.1 to 105.2. The next day, May 29th, an X-ray of chest was made, the findings of which were surprising and disappointing. I expected the X-ray to reveal definite and grave pathology, because he had expectorated that day 320 cc of blood streaked sputum. The X-ray report was as follows:

Patient D. W. G. "There is an increase in density at each root area, more marked at the right side. The appearance of the upper lobes, especially the left, is suggestive of an early tuberculosis infection."

The roentgenologist told me later he did not think that the clinical symptoms observed could be attributed to the chest from his radiologic findings. This sequence of events then is almost pathognomonic; that is, the

expectoration, the vast amount of muco-purulent sputum, septic temperature and prostration, the absence of tubercle bacilli and the negative finds of the X-ray. Reports from the laboratory now revealed Vincent's bacilli in preponderance. The temperature of the patient continued high. The next day, May 30th, he had a chill and was delirious. I was rather afraid of intravenous medication of any kind, with the patient in this critical condition, but gave cocadilate of soda intra-muscularly and Fowler solution by mouth. He continued to run a septic temperature for four more days, with a gradually decreasing amount of sputum, which now became blood tinged. On June 4th his temperature was down to 99.2 in the morning and 103 at 4 P. M. This day, though, he looked brighter, and I gave him .6 grams of neo-arsphenamine. No appreciable drop in temperature was recorded, but his sputum became less. It still contained large numbers of Vincent's organism. Two days later, on the 6th, his temperature reached its lowest level, 99 in the morning and 101.2 in the afternoon, and remained at this level for two days. During this time I examined his chest carefully but could find no definite pathology, except a few moist rales at the bases of both lungs posteriorly. This I attributed to a hypostatic congestion. June 9th, that is, two weeks after I saw him first, but four weeks from the time he was taken ill, he again began expectorating a large quantity of fetid sputum, and his temperature rose to 104 in the afternoon. At this time it became exceedingly painful and difficult for him to take any form of nourishment. This was due to a severe ulcerated stomatitis, smears of which showed numerous Vincent's bacilli. He ran a high temperature for five days, and then a slight drop was noted. On June 14th I again gave .6 grams of neo-arsphenamine, after which his temperature fell to practically normal. He remained in bed two weeks longer and was then allowed to get up. I forgot to mention the fact that sodium perborate paste was used for the stomatitis and the condition cleared up beautifully. He had lost exactly 80 pounds during his illness. The patient has been well and working ever since. He came in about one month ago because he was afraid he was getting over-weight. He had not only regained his original 235 pounds but was 10 pounds over this. I had him X-rayed yesterday, with the following report from the Roentgenologist:

"Part to be examined: CHEST.

"There is an increased density at both hilus areas, with a generalized peribronchial thickening, which is most marked in the lower lobes. There is nothing characteristic in his appearance.

"There is one fairly calcified node at the left hilus, and several smaller ones on the right side. The appearance of the entire chest shows some improvement since the time of the last examination, May 28th, 1929, the bronchial shadows being more clear cut and less dense."

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4. Bruce.

DISCUSSION ON PAPER OF DR. LEVINGTON

Dr. Edson W. Glidden, Alto, Ga.—All that I can add to this most excellent paper of Doctor Levington is a consideration of the chronic types as illustrated by twenty-five cases recognized at the State Tuberculosis Sanatorium during the past two and one-half years.

All of our cases when they reached us had become chronic; twenty-two of them showed upon lipiodol and x-ray study, bilateral (bibasal) bronchiectasis—two unilateral and one abscess. In all of these cases the spirochetes and fusiform bacilli were demonstrated by the Fontana method, or Giemsa's stain; in all cases teeth were scrubbed, and a mouthwash was used before specimens of sputum were obtained—the sputum itself, however, was not washed. All cases were checked and rechecked for tubercle bacilli, an average of ten specimens examined on ten different days for tubercle bacilli. In two cases tubercle bacilli were demonstrated once or twice in addition to the spirochetes and fusiform bacilli—in both of these cases a definite tuberculous lesion at apex or apices as found by physical and x-ray examination. Unfortunately we did not have an animal inoculation check in these cases. Ten of these other cases have a negative tuberculin check. It is felt that except in the two cases with tubercle bacilli, tuberculosis has been thoroughly ruled out, and that the two cases suffered both conditions.

All twenty-five cases have been lipiodoled and the dilated bronchi demonstrated satisfactorily, except in one case where only a peri-trunkal fibrosis was noted, and in another where nothing definitely abnormal was made out by x-ray, though in all these cases physical signs, including rales, were elicited. The average duration was thirty-seven months at the time they came to our clinic—the symptom first elicited was used as the milestone in estimating duration—the longest twelve years, the shortest two months. Extent of lesion seems not to follow any definite ratio to duration.

The cough was severe in nine, moderate in eleven, and slight in five. It is interesting that seventeen of these cases had blood-spitting some time during the course of the disease, but usually in relatively small amounts (the three who had positive Mantoux tests and one with tubercle bacillus demonstrated, did not have hemoptysis).

Fifteen patients gave a history of chest pains, but only eight had sweats; sixteen had dyspnea, but in none was it severe. Net loss of weight in this series averaged 15½ pounds.

Seven patients stated that tubercle bacilli had been demonstrated before coming to the sanatorium, but we have no official or professional report to back this, and in some of these cases we have reason to doubt the truth of the statement. Our own laboratory was able to substantiate this finding of tubercle bacilli in only two cases; in these we were able also to demonstrate clinically or roentgraphically tuberculous lesions, as well as basal bronchiectasis or abscess.

Clinically by physical examinations we were able to demonstrate either diffuse bilateral or basal pathology,

as evidenced by breath change and rales, also percussion dullness, etc., in practically all cases.

By roentgenograph and lipiodol we were able to demonstrate bronchiectasis (saculated and cylindrical) or abscess cavities of varying size either unilateral or bilateral—more frequently bilateral and basal in all but four cases. In these cases with tubercle bacilli in sputum, upper lobe lesions, probably tubercular, were demonstrated—in addition we found three cases which seemed to show healed tubercular lesions.

Studies of the blood picture showed an average red blood cells for the 25 of 4,260,000, white blood cells 9,600, hemoglobin 65, polymorphonuclears 59, S. L. 31, and L. L. 9.

In all of these cases Wassermann reactions were negative. The amounts of sputum in most cases were rather large, though variable in type and amount, and in many, foul.

In these cases 50 per cent showed changes in the phalanges, clubbing and curved nails. In nineteen the onset was of catarrhal type, "pneumonia," gripe, colds, etc. Four insidious and indefinite—two hemorrhagic.

The temperature was not striking in our cases; no typical curve was observed.

Treatment: Lipiodol for diagnosis seemed to have a beneficent therapeutic effect. Arsphenamin also was helpful. In all cases we drained the bronchial system by postural treatment. Of course, restitution of tissue is not to be expected, and drainage is recommended to be continued.

Difficulty in diagnosis of chronic pulmonary diseases from tuberculosis is emphasized by this study, and in these cases depends primarily upon laboratory study of sputum aided by x-ray, lipiodol being most valuable in demonstrating bronchiectasis.

INDISPENSABLE USES OF NARCOTICS IN TREATMENT OF COUGHING

Robert A. Hatcher, New York (*Jour. A. M. A.*, April 25, 1931), emphasizes that the exact dose of morphine necessary for the relief of coughing cannot be stated in milligrams or fractions of a grain because severe irritation of the respiratory tract gives rise to strong stimuli, and the stronger the stimuli, the greater is the depression of the center necessary to abolish the reflex that such stimuli would induce. Furthermore, the frequency of coughing must be taken into consideration and the degree to which it is necessary to lessen it. One must also consider the probable state of the center on which the drug is expected to act. When there is widespread central depression the respiratory center is more easily depressed to the danger point than under normal conditions, and in such cases morphine must be used cautiously. Obviously, if demulcents are used to lessen local irritation in the respiratory passages, less depression of the center is necessary than when excessive irritation cannot be treated locally. When it is necessary to depress the cough center, one should invariably use the smallest dose that will serve the purpose and should not employ it more frequently than is necessary to maintain the required degree of control.

RABIES*

JACK C. NORRIS, † M.D.

Decatur

Rabies is an acute infectious disease of mammals caused by a specific virus, and communicated to susceptible individuals by the saliva of an infected animal coming in contact with a broken skin surface. Commonly used synonyms are Hydrophobia, Lyssa, Hundswuth, and Rage. The name Rabies comes from the Latin word defining its characteristic symptom: furor or madness. Hydrophobia is a word of Greek derivation meaning fear of water. Lyssa is a Greek word meaning Hydrophobia.

Historical

The disease is one of the oldest in existence, but because of its scarcity among humans and a long incubation period before development after the bite, its source for a long time was unrecognized. The Hindoo Works of 600 B. C. by Susruta record that a disease resembling Rabies then existed, and a prophylactic treatment was advanced. Plutarch says the disease was well known in Grecian traditions. The Aesklepiadae recognized the disease. Pausanius, the myth of Actaeon, tells of a hunter being torn to pieces by rabid animals. In the Iliad, Hector is accused of being stung with a furious Lyssa. The disease is mentioned by Virgil, Ovid, and Pliny. Hippocrates does not mention the disease in his writings. Aristotle, about 300 B. C., writes of it and states that it is purely an animal disease transmitted by the bite of an infected animal. Celsus, in the first century gave a description of the disease, especially as concerns the human. He claimed that it was due to the bite of rabid animals from whom infectious material was transmitted. He advised that the wound resulting from a bite be thoroughly bathed and then cauterized with a hot iron so as to prevent the occurrence of the disease. Van Sweiten, many years later observed the paralytic form in humans. Other authors at this period, among them Morgagni, believed that the bite of a dog not infected with the disease was capable of transmitting the infection. Bosquillon, in

*On program to have been read before the Medical Association of Georgia, Augusta, Ga., May 16, 1930.

†From the Department of Pathology and Public Health, Emory University School of Medicine, Emory University, Ga.



These drawings are of Negri bodies as have been observed in different phases of division.



This picture represents a schematic idea of the writer's opinion as to the method of the Negri bodies' life cycle. It indicates division by karyokinesis. The first cell is evidently a resting stage. The last cell represents one of the very small bodies without its nucleus. The number of individual cells depend upon the number of nuclei in the dividing cell.

1802 originated the idea that the disease was simply due to fright. Pasteur, in 1880 discovered that the disease may be prevented by injecting increasing doses of the virus into the person or animal bitten. In 1903 Negri, a famous Italian investigator, described certain bodies within the brain substance of infected animals which he called Negri bodies. He claimed their specificity for the disease. His findings have been corroborated the world over. The Willard Park Laboratories in New York, in 1906 worked out a Magenta-methylene blue stain which stains the bodies very nicely. This was the last and one of the most important additions to the modern knowledge of the disease, its cause and diagnosis.

The Causative Agent

The so-called Negri bodies are incriminated. In size they vary from pin-point dimensions up to that of a white blood cell, and are rounded or ovoid. (This of course in stain smears). There is convincing evidence that this body is the true causative organism. Hiss and Zinnsser have treated brain tissue of infected animals with antiformin and after trituration were thus enabled to free the bodies from the tissues for observation. If the body is but a cell degeneration, as claimed by Babes, then such results would be unlikely. Nagouchi, by using sterile kidney tissue in ascitic fluid to which positive brain substance was added and anerobic influences utilized, obtained cultures of small globoid bodies that later developed nuclei. He carried these bodies through twenty-one generations, and they remained virulent for one hundred days. This seems to prove that the body is the infectious agent. These bodies have never been classified. Williams believed that they are of a protozoan nature. The organism tends to change size and shape in different animals. There are different opinions concerning their development and life cycle. Transverse division is often seen and evidence of budding is noticeable. The writer, after examining several hundred animal

brains and making close observation presents drawings from smears showing the parasite in all stages of development, which he believes presents strong evidence of a definite cycle or caryokinetic method of division, and further presents a schematic drawing illustrating a theory of the development in detail. The illustrations have complete explanatory statements.

Incubation Period and Occurrence

In the human the symptoms seldom appear under thirty days after the bite, and often the time of manifestation is even longer, being around forty-five to sixty days. Whenever the bite is upon the face the disease will occur earlier. The earliest recorded case is eleven days. It has also been reported that cases have occurred twenty years following the bite. Chirac presents a case occurring ten years after the bite. Francis of Padua records a case occurring fourteen years after the bite. Not infrequently a case will develop six months after the infection. The disease being truly canine or of the lower animals, the human is believed to be somewhat insusceptible. This belief is born of the fact that few people develop the disease even when they fail to take the Pasteur treatment. It is possible, and probably so, that in truth the human is very susceptible, but that the infectious material often fails to reach or touch nerve fibres proper for transmission. The Negri body has an affinity, it seems, for nervous tissue.

In the dog the disease most often occurs about fifteen days after infection. Often the time may be longer. A friend of the writer, who is a veterinaria of forty-six years' practice, believes the disease occurs most often on the forty-fifth day after the bite. The general opinion is that an infected animal will always show symptoms on or about the twelfth day. Animals should always be held, when under suspicion, at least fifteen

days and preferably thirty days. The owners should be cautioned to return dogs to the laboratory whenever they act suspiciously. When the animal is inoculated intrathecally the incubation time is of course shortened; and subsequent inoculation tends to fix the virus. The saliva of rabid animals is much more active than that found in the central nervous systems. A case is mentioned in which a woman contracted rabies after biting and holding a thread between her lips which she was using to mend a coat torn by a rabid dog. Her cracked lips permitted the entry of the virus. The submaxillary saliva of a dog has been shown to be infective four days before the onset of active symptoms. The infectious saliva is killed by sunlight in forty hours. Formalin is the quickest and surest chemical destroyer.

The disease is always found wherever there are dogs, wolves, jackals, coyotes .etc. Wolves and coyotes seem most often affected. The coyote has been accused of being the carrier of the Negri body. England and Australia are practically free from Rabies, this being accomplished by their rigid muzzling laws. Japan is making rapid strides towards its annihilation. The disease is very prevalent in America, some states having quite a considerable number of cases. In the state of South Carolina since 1909, five thousand, eight hundred and twenty-seven persons have been given the Pasteur treatment. There have occurred twenty-one deaths, eight of which were because of failure of treatment. There are, of course, many cases that are not reported because of the treatment being obtained from pharmaceutical houses. The value of the Pasteur treatment cannot be over-estimated when we compare the cases occurring before this preventative was discovered. Before the Pasteur method, sixteen per cent of those bitten by rabid animals developed the disease, and now after the treatment, only forty-six hundredth per cent ever develop the malady. Some states have percentage results that are even better than those listed above.

Rabies, in spite of the availability of the Pasteur prophylaxis is definitely on the increase in several Southern states. This increase cannot be laid to the incompetence or

inefficiency of the State Health Departments; but instead, is due to the disinterest of the people, many of whom do not obey warnings regarding vaccination, incarceration and reporting of rabid animals in their neighborhoods. Then, too, there are many who neglect their treatments. In Georgia in 1928 there were 210 positive rabid dogs; 1,260 treatments and three deaths; in 1929 there were 289 positive dogs, 1,474 treatments given and three deaths. The figures bespeak the seriousness of the problem.

Symptomatology

While there is considerable data available from which detail of the symptoms may be derived, I have obtained the data used in this paper from a case at the hospital.

On October the twenty-first a young, fairly well nourished female negro was bitten on the cheek by a very curiously acting dog. The Health Officer advised the Pasteur treatment, which was instituted two days later. During the interim of the treatment the patient became careless, even after warning, and missed three of the doses. On the sixth of November, the patient stated that she had a little fever the entire day but did not feel badly. On the seventh day she had a very severe headache, so severe that she was totally incapacitated for work. On the afternoon of that day she came to the hospital. She presented definite nervous symptoms and was at times irrational. On the morning of the eighth day she was extremely nervous and having spasms. She was emitting varying and somewhat incoherent murmurings, and again wild, fearful screams. Between these seizures she would readily answer questions, and do so with remarkable intelligence. She resented anyone touching her, although she wanted someone to wipe her mouth. She complained of choking. She was profusely salivated. At two o'clock the spasmodic attacks were increasing in severity and the interval between seizures was shorter. She was perspiring profusely. Her pupils were fixed and her eyes presented a wild, glary appearance. She could not be fed. At four-thirty she was unconscious, her respirations were rapid and she seemed to be in a state of tetany. Morphine and other narcotics had no effect. Her condition progressed from bad to worse and at

six forty-five she died. Several times during the interim of her illness she presented the true hydrophobia; she begged someone to bring her water, yet when she saw it she would scream, "Take it away, it chokes me and hurts my throat."

In the Animal

In the animal the symptoms are somewhat varied, and in some instances simulate the human manifestations. The animal will always have the glassy eyes, will always be nervous, never still, continually rising and sitting on his rear limbs. Many times they are whiny. Often they are ferocious, making attempts to bite. A good, kind and intelligent animal will present a pitiful appearance, trying at times to demonstrate his affection, and yet so extremely nervous that he cannot remain still. Often, even against every inhibitive effort, he will snap at one. They seldom drink water with the disease; but will often partake of food even a few hours before death. In the early stages of the disease they often run for miles. The victim will usually die within three days after onset. Salivation is often absent; usually they do not seem so very toxic but are always very, very nervous.

Treatment

The early idea of treatment is interesting; Celsus reads as follows:

"The only remedy is to throw the patient unsuspectingly into a pond, and if he has not a knowledge of swimming, to allow him to sink in order that he may drink and so raise and again to depress him so that, though unwillingly, he may be satiated with water, for thus at the same time both the thirst and dread of water are removed, etc."

In the modern treatment of Hydrophobia, two phases must be considered: the treatment of the disease per se, and the prophylaxis.

Sadly but truly, Rabies has a mortality of one hundred per cent. No true case of Rabies has ever survived. One author, however, claims to have cured three cases with the use of Arsenical injections, but the truth of this claim has not been definitely established. About all that can be done for the victim is the continual application of sedatives and use of atropine and morphia. Feeding may be given by rectal infusions. The patient is usually placed in a comfortable straight

jacket. The paroxysms when extremely severe, may be controlled with inhalations of chloroform.

It is interesting to consider a case treated with transfusions from an individual who had recently completed a Pasteur treatment, the theory being that the recipient received millions of anti-bodies direct through the blood constituents. Mr. J. F. Sellers of Georgia State Board of Health reports a case so treated. This patient was severely bitten about the arms and face and the situation appeared very serious. The transfusion was utilized together with the intensive injection of the virus. The patient was protected in this manner and did not have Rabies.

In the prophylaxis of Rabies, the remarkable man of science, Pasteur, has given to the world a preventative vaccine. This may be obtained from the State Hygienic Laboratory in a series of twenty-one doses containing thirty-five hundred units. As quickly as possible after the bite the treatment should be instituted. The dose is in single ampules of two and one-half cc each. The laboratory technique is as follows: The patient is placed upon the operating table and in a reclining position. A small area over the lower abdominal (hypogastric region) wall is cleaned with sixty-five per cent alcohol and painted with iodine. The contents of the ampule is injected subcutaneously into the cellular tissue in this area, the needle being inserted while held in slanting angle so that in no instance will the peritoneum be entered. The patient is cautioned to report daily for the treatment. Sometimes during the treatment, about the eighth to tenth days, there usually appears a little itchy, uncomfortable feeling at the sites of injection. This always disappears in a day or so. We have never had an unfavorable reaction following or during treatments, seven-month-old babies and old people included. One patient did develop an idiosyncrasy to meat. He desired and hungered for meat, yet upon eating it he became sick temporarily. This phenomenon was explained upon the belief that the increased protein from the rabbit cord produced a slight anaphylaxis. This condition disappeared on the nineteenth day of the treatment. It must be carefully borne in mind that all wounds

because of dog bites must be immediately cauterized. The best cautery is nitric acid. Some authorities recommend first the application of phenol and then the nitric acid. When it is impossible to have the nitric acid then iodine may be used. Irrespective of your cautery, always insist on the Pasteur treatment. Protection is limited and may disappear in six to eighteen months.

Pathology

The gross pathology shows general emaciation with rapid putrefaction. The blood is dark and thick. The brain and its membranes are congested and slightly hemorrhagic. There is general congestion of the gastro-intestinal and respiratory tract.

The micro-pathology is to be found mostly in the nervous system. There is a cellular infiltration of endothelial supporting meshes of the ganglia with some destruction of the ganglia. The pneumogastric, plexiform ganglion, and the gasserian ganglion are also affected.

The blood generally shows a neutrophilic hyperleucocytosis with the polynuclears ranging about eighty to eighty-four per cent. Occasionally a few mast cells are found.

Summary

- (1) A brief historical summary of Rabies is presented.
- (2) In spite of a modern protective measure against the disease, the number of deaths is increasing, though no fault of the anti-virus.
- (3) A theory as to the life cycle of the Negri body is illustrated.
- (4) The symptoms and characteristics of the disease in the human body and the animal are summarized.

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The American Medical Association meets in Philadelphia, June 8th to 12th. Official Call was published in the April issue of this Journal.

PRESENTATION OF PORTRAIT OF DR. EDWARD C. DAVIS TO EMORY UNIVERSITY SCHOOL OF MEDICINE, BY THE EMORY UNIT*

FRANK K. BOLAND, M.D.

Atlanta

Mr. President, Dean Oppenheimer, Mrs. Davis, Ladies and Gentlemen:

It is with conflicting emotions that the Emory Unit, on this occasion, presents to the Medical School of Emory University a portrait of its comrade and chief, Dr. E. C. Davis. Sorrow comes from our very recent bereavement, but joy comes from the fact that we are permitted so early to thus pay him this merited tribute. We have further pleasure in the fact that his likeness, a fine example of portraiture, was painted by a man who was born and raised in Atlanta, Louis Gregg, and we do not believe that anyone could have done the work better.

The portrait is presented at the invitation of the committee appointed from the medical faculty to select distinguished members of the faculty for the honor. We feel that Dr. Davis is entitled to this distinction for three particular reasons; first, for his character; second, for his high professional attainments, and his contribution to medical education and medical organization; and third, for his service to his country and the university in organizing Base Hospital 43 of the U. S. Army, better known as the Emory Unit.

There were four outstanding things in his life which impressed me. First, he was a man who did things. So many able, well-trained men of today seem to lack initiative, and the result is they accomplish but little. Dr. Davis was not this kind of a man. He was one of the prime movers in forming the Atlanta School of Medicine, an integral part of our present medical school. He was a co-founder of the Davis-Fischer Sanatorium, and he conceived and organized the Emory Unit. Second, the young doctors of this community never had a better friend than E. C. Davis, as many here tonight can testify. He helped to put many a struggling disciple of Aesculapius on his feet. The third characteristic

*Presentation Address at Emory University, Ga., April 10, 1931.

which impressed me was his devotion to his family. He was a home-loving man, and always thought of his family before he thought of himself. Fourth, he was brave and patriotic. He was a veteran, not only of the World War, but of the Spanish-American War as well, and had the call come for him to take up arms in either of these conflicts, instead of serving in the medical corps, he would have done so fearlessly.

While his name has never been associated with the perpetuation of the name of Crawford Long as the discoverer of ether anesthesia, to my mind he played an important part in the controversy, and thus showed his spirit as a fighter. You will recall that on the wall of one old operating room in the Massachusetts General Hospital it says "in this room ether anesthesia was first demonstrated by W. T. G. Morton, in 1846." Once, when Dr. Davis was visiting this hospital with some friends, a Northern doctor, who was present, left the party for a few minutes, and when he returned said, "I have just been in the room where ether was first given." Dr. Davis replied, "If that is so, you certainly have done some travelling, because the place where ether was first administered is 1,200 miles from here, in Jefferson, Ga."

Here we see a reproduction of the statue of Crawford Long, which reposes in Statuary Hall in the Capitol, at Washington. We should differentiate between Statuary Hall in Washington, and the Hall of Fame, which belongs to New York University. Distinguished Americans have their names placed in the New York University Hall of Fame through the functioning of its 100 electors. These electors are appointed from different parts of the United States, but there happen to be but two from his section of the country, one from Tennessee, and one from Georgia. About ten years ago, the electors voted to place Morton in its Hall of Fame as the discoverer of anesthesia. This had just happened when the sectional meeting of the American College of Surgeons took place in Atlanta, and Dr. Davis, chairman of the program committee, started such propaganda in this meeting to give Long his proper recognition, that Dr. Joe Jacobs, Dr. Long's daughter, Mrs. Frances Long Taylor, and others in a position to do so, carried the fight

on until the statue was placed in Statuary Hall. Thus, again Dr. Davis was a man who did things. Long and Stephens were voted to be placed in this Hall as Georgia's two most illustrious sons, by the legislature, in 1906, but the legislature never provided funds for the purpose. The money, as you know, was raised by private subscription, mostly from the medical profession of Georgia, although a great deal of necessary help from outside the state was given.

Dr. Davis first became associated with medical teaching as one of the founders of the Atlanta School of Medicine, in 1905, in which institution he was professor of obstetrics and gynecology. He continued with the school when, in 1913, it joined the Atlanta College of Physicians and Surgeons, to re-form the old Atlanta Medical College, and remained with the school again when, in 1915, it became the medical school of Emory University. After the world war, on account of his health, Dr. Davis was made Emeritus Professor of Obstetrics and Gynecology, which was his title at the time of his death. He received his A.B. from the University of Georgia, in 1888, his M.D. from Louisville University Medical School in 1891, and was granted the degree of LL.D. by Emory last commencement. He was past president of the Fulton County Medical Society, and the Medical Association of Georgia, and was a member of the board of governors of the American College of Surgeons. He was a virile teacher of obstetrics and gynecology during his active years, and his students testify to the forcefulness of his instruction. Certainly his teaching, although given in the didactic manner, was such as to make a lasting impression upon students. Few members of the medical profession in the state of Georgia ever enjoyed a larger practice in surgery, gynecology and obstetrics than E. C. Davis, and few doctors had more grateful patients, who appreciated not only his professional skill, but his uniform kindness.

Probably the achievement for which he will be best remembered was the organization of Base Hospital 43, representing Emory University medical school in the World War. Soon after the United States entered the war, the Red Cross Society requested medical schools and large hospitals throughout the

country to organize base hospitals, using their personnel as the nucleus for the necessary number of medical officers and nurses. E. C. Davis had served as a major in the medical corps during the Spanish-American War, in 1898, and he at once realized the importance of having Emory University take its place as one of the educational institutions to offer its services to the country in time of war. He set about to accomplish this purpose with characteristic zeal, although he was then a sick man. The result was that we were one of the first of these hospitals to be established in the South, and made a record for good work second to none in the country. The founder of the hospital, known as the "Daddy of the Emory Unit," who entered the service as a major, and was made Lieutenant Colonel when we reached Blois, France, was compelled to quit the unit soon after its arrival on account of sickness, but he had already succeeded in his lofty purpose.

Had it not been for the initiative and patience and perseverance of this man, Emory, no doubt, would not have been represented in the world war. As it is, the name of Emory will go down in the annals of American history as no slacker, but as faithfully performing its duty. Sometime ago I wrote an article about the work of the Emory Unit in France, which was entitled, "When Emory Went to War." The editor changed the title to read, "When the Emory Unit Went to War," wherein he failed to catch the meaning. I was trying to tell that because a college had no intercollegiate athletics, it was not necessarily a mollycoddle institution, and could fight when the occasion arose. 'Tis true, *Emory* went to war.

And so, President Cox and Dean Oppenheimer, the Emory Unit, Base Hospital 43, presents the medical school with a portrait of the beloved E. C. Davis, dignified, energetic, sweet, and courageous; surgeon, teacher, patriot and man, who has well earned a niche in our Hall of Fame.

DISLOCATION OF THE SHOULDER

Clay Ray Murray, New York (*Jour. A. M. A.*, Jan. 31, 1931), calls attention to the common faults in the care of the ordinary type of dislocation of the shoulder as observed in a fracture clinic, and the results as reflected in prolonged convalescence and even permanent disability.

ACCEPTANCE OF PORTRAIT OF DR. E. C. DAVIS FOR EMORY UNIVERSITY SCHOOL OF MEDICINE*

RUSSELL H. OPPENHEIMER,† M.D.
Emory University

A school, as it progresses through the years, develops tradition and history. Both are centered largely around the lives and work of the men who have associated themselves with it. We have been neglectful, not in acknowledging our appreciation to those who have given so much to the school of medicine, but in failing to do anything to perpetuate their memory for the benefit of those to come in the future.

Last year, when visiting the medical school of the University of Pennsylvania, I saw hundreds of portraits adorning the walls of the school. Among them were the portraits of men whose work had been of importance to medical science as a whole, and of men whose work related solely to the work of the school of which they were a part, and did not radiate beyond it. We have had many men associated with the School of Medicine who have contributed much to medical science, or to the development of the school. Dr. Davis was one of these. We are particularly grateful to the Emory Unit for this portrait of him. It will hang always in the medical school where faculty and students, alike, may view it. As they look at his picture, they may think of his ideals and objectives and try to set theirs as high; they may think of the handicaps which he faced and feel theirs to be less; they may think of his efforts to achieve his ideals and objectives and strive even harder to attain their own. Therefore, I am happy to accept this portrait of Dr. Davis for the School of Medicine, its faculty and students, and wish to express our very deep appreciation for it.

*Address of acceptance, Emory University, Georgia, April 10, 1931.

†Dean of Emory University School of Medicine.

Howard McIlvain Morton, Minneapolis (*Jour. A. M. A.*, Dec. 13, 1930), reports a case of melanoma of the conjunctiva. The tumor was readily removed, and, apparently, without leaving involved areas. The wound healed and looked well at the end of four or five days, when the patient returned home.

TYPHOID FEVER WITH INTESTINAL PERFORATION*

Report of Case Complicated by Meckel's Diverticulum

B. C. TEASLEY, M.D.

Hartwell

GERALD H. TEASLEY, M.D.

Atlanta

This case is being reported for the following reasons:

1. A perforation may occur in a mild case of typhoid fever.
2. Diagnosis is difficult at times and even the most experienced may fail.
3. This case was complicated by the existence of a Meckel's diverticulum above the site of perforation.

The sad experience of the senior author, with perforations in typhoid fever, corroborates the reports of others in its high mortality and warrants a further study at this time. During thirty years of practice, he has seen four cases of typhoid fever complicated by intestinal perforation. The first occurred twenty-eight years ago and at that time there was nothing to be done except treat the patient expectantly. The second case occurred thirteen years later and was seen by a consultant who did not agree with the diagnosis until it was too late to operate. The third case was seen two years ago and a surgeon called immediately. He was not certain of his diagnosis and would not consent to operate. All of these cases had a fatal termination. The case being presented is the fourth and came near having the same ending as the other three, as the consulting surgeon disagreed as to the diagnosis and delayed surgical intervention.

CASE REPORT

A farmer, aged 33, came to the office June 19, 1930, complaining of dull headache, general malaise, loss of appetite and generalized body pains. These symptoms had begun about ten days previous to the first visit. They gradually became worse so that he was unable to do his normal work. He gave no history of bronchitis, epistaxis, urinary disorders nor gastro-intestinal disturbances except the loss of appetite.

The patient appeared drowsy but not acutely ill

and was not confined to bed. The skin except for dryness appeared normal. The temperature was 101, pulse 80, respirations 18, the systolic blood pressure 116, diastolic 80.

General examination of the head, thorax and extremities was negative.

In the abdomen there was no distension, tenderness, rigidity nor muscle spasm. The liver and kidneys were normal in size. The spleen was moderately enlarged.

Laboratory data: Urinalysis was negative. Hemoglobin was 90 per cent; red blood cell count was 4,500,000; white blood cell count was 7,600; differential count: lymphocytes 30 per cent, mononuclears 10 per cent, neutrophils 60 per cent. The Widal reaction was positive.

A diagnosis of typhoid fever was made and the following treatment begun: rest in bed, liquid and soft diet, forced fluids, urotropin gr. 7½ in a glass of water three times a day, cold sponges, arophen capsules for fever and restlessness.

The patient was seen daily for nine days. During this time the course of the disease was apparently satisfactory. The temperature ranged from 101 to 104; the pulse was never over 80; no distention, diarrhea nor other intestinal disturbances appeared. At 10:00 a.m., June 28th, no appreciable change in his condition was noted. At 8:00 p.m. we were again called to see him. Four hours previously he had had a normal bowel movement. One hour later, he had been seized with a sudden, excruciating pain in the abdomen. Thinking that it was only a colicky spell which would soon pass away, his family had not called us at that time.

Examination showed a marked change in his condition. There was an anxious expression on his face, as if in great pain, with limitation of abdominal respiration, and rigidity of the abdominal muscles forming the so-called "board-like abdomen." Palpation revealed marked tenderness over the entire abdomen without definite localization. Hyperesthesia of the skin of the abdominal wall was present. There was no distention. Movement of the patient caused considerable pain. Temperature was 103, pulse 80—the same as earlier in the day. A diagnosis of intestinal perforation was made and immediate surgical intervention advised.

A quarter of grain of morphine was given as the patient had to be taken twenty-two miles to a hospital. A surgeon was called and asked to have the operating room set up for an emergency laparotomy. Upon arriving there about an hour later, the patient's symptoms had subsided due to the effect of the morphine. There was no rigidity and only slight tenderness over the lower abdomen and right kidney. Blood pressure was normal, temperature and pulse the same as before leaving home. Laboratory findings at that time were as follows: white blood cell count, 9,560; neutrophils, 60 per cent; urinalysis was negative.

With this almost normal white and differential count, flaccid abdomen, absence of pain and comfortable condition of the patient, the surgeon thought that he was suffering from a slight digestive upset and

*Read before the Eighth District Medical Society, Washington, Ga., August 13, 1930.

advised postponement of the operation. For the same reasons, we agreed, an almost fatal mistake, and one that illustrates very clearly the illusive calm occasioned by the administration of morphine and also the unreliability of the laboratory in such a condition.

Eight hours after admission, the patient presented a different picture. The signs of peritonitis were present: a distended abdomen, extreme tenderness on palpation, hyperesthesia of the skin over the abdomen, quiet peristalsis and pulse of 120. The white blood cell count, which was repeated at this time, was 16,000, with 83 per cent neutrophils.

A laparotomy, performed at 11 a.m., eighteen hours after the first symptoms had appeared, revealed intestinal contents in the peritoneal cavity with evidence of inflammation. A Meckel's diverticulum, about the size and shape of the thumb, was found near the ileocecal junction. It was acutely inflamed and gangrenous at the tip. Just distal to this, there was small perforation of a typhoid ulcer in the ileum. The ulcer was closed and the diverticulum invaginated with a purse string suture—testing showed that no obstruction was caused by this procedure. Drains were inserted and the abdomen closed.

The following day, on account of a paralytic ileus, enterostomy was done. The patient has had a stormy convalescence. At the present time the peritonitis has been cared for but the enterostomy sinuses are still draining. He appears much better and is apparently recovering.

Discussion

Intestinal perforation is the most dreaded complication of typhoid fever and, even with early diagnosis and proper treatment, carries a high mortality.¹ It is usually single, although it may be multiple; as many as twenty-five perforations having been demonstrated at necropsy. The most frequent site is in the last twelve inches of the ileum, although it may involve other portions of the gastro-intestinal tract. It usually occurs during the third week of the illness. It is more frequent in the male and occurs less often in the colored race. It is rare under the age of 10. About 12 per cent of necropsies in typhoid fever show perforations. Among the predisposing causes may be listed: diarrhea, flatulency, improper diet, straining at stool and other unusual physical exertions. On the other hand, it may appear in a mild case without other complications.

The diagnosis of intestinal perforation is to be made chiefly by means of certain physical signs and symptoms. If, about the third week of the disease, the patient complains of a sudden, sharp, excruciating pain in the abdomen which is accompanied by marked rig-

idity and spasm of the abdominal musculature, perforation should be suspected. The initial pain is rarely absent if the patient's mental condition is good. It may be continuous or paroxysmal in character, but tends to become more severe. Movements increase the pain. Other findings, such as shifting dullness in the flanks, diminution of the liver dullness, friction rub, changes in the blood pressure, pulse and temperature, leukocytosis, are not constant nor entirely reliable signs. Late symptoms of abdominal distention, hiccups, nausea, vomiting, rapid and weak pulse and a change in the blood count are not those of a perforation but peritonitis.

Laboratory corroboration of the physical signs is of value when it occurs, but is not so important when it does not agree in this type of case. Diagnosis and operation should never be delayed on account of a failure to find leukocytosis. Livingston and Squires,² in a study of fifty-five blood counts in typhoid fever with perforation found that in 15 per cent the leukocyte count was above 12,000; in 15 per cent below 12,000; in 52 per cent there was no change and in 18 per cent an actual decrease in the white blood count. All cases occurring during the first three weeks showed only a slight increase or none at all and those showing a decrease occurred during the same period. Those with fairly marked leukocytosis occurred in the seventh and eighth week of the disease. From this they concluded that leukocytosis is not constantly nor even usually seen in perforation while, on the other hand, high grade leukocytosis is common in other complications of typhoid fever, such as acute cholecystitis, appendicitis and otitis media. Wiley³ observed the same thing in his cases and gave an example in which the white blood count was 4,800 just before operation.

Another point of interest in this case is the question of the influence of the Meckel's diverticulum. About 12 per cent of these diverticula are lined with gastric mucosa, and there are numerous cases on record of ulcers at the junction of this mucosa with that of the intestine.^{3,4} These are often spoken of as peptic ulcers of Meckel's diverticulum. If in this particular case the diverticulum were lined with gastric mucosa, its acid secretion

might have had some influence on the etiology of the perforation of the ulcer distal to it. On the other hand, the majority of these diverticula have a lining similar to that of the appendix. In this case, it is possible that the gangrenous area at the tip of the diverticulum was a typhoid ulcer. Unfortunately, it was invaginated and no specimen was obtained for pathologic study.

We will not attempt in this paper to give a differential diagnosis from other complications. Conditions to be considered are cholecystitis, appendicitis, thrombosis of the iliac veins, mesenteric thrombosis, renal colic, intestinal obstruction, pneumonia and pleurisy with referred pains.

Conclusions

1. Perforation may occur in a mild case of typhoid fever. This report gives a history of perforation in a moderately severe case.

2. The diagnosis is often difficult.

3. Morphine may temporarily mask symptoms.

4. The leukocyte count is of little or no value and should be considered only as corroboratory evidence. Postponement of operation on account of a low leukocyte count is to be condemned when the other signs are positive.

5. The possible influence of Meckel's diverticulum in this case can only be surmised.

6. Too much emphasis cannot be put upon the appearance of a sudden, severe, agonizing pain accompanied by muscular rigidity in the diagnosis of intestinal perforation.

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3. A case of Perforated Peptic Ulcer of Meckel's Diverticulum. McCalla, A. J., *Canad. M. A. J.*, 17:79-81, January, 1927.
4. Peptic Ulcer of Meckel's Diverticulum. Stuz, E., and Worniger, P., *Ann. Surg.* 83:470-478. April, 1926.

HYPERINSULINISM FROM B-CELL ADENOMA OF PANCREAS

Archie D. Carr, Robert Parker, Edward Grove, A. O. Fisher, and J. W. Larimore, St. Louis (*Journal A. M. A.*, April 25, 1931), report the case of a youth of 19, who suffered increasingly of attacks that were similar to the syndrome resulting from an overdose of insulin. They were relieved by the ingestion or administration of dextrose. The increasing severity of the attacks justified exploration and caused the patient and his parents to accept surgical measures. A localized tumor of the pancreas was found and removed.

PRELIMINARY PROGRAM — EMORY CLINICS

JUNE 8TH TO 11TH

Emory University School of Medicine

Vitamin Deficiency Diseases in Children—Joseph Yampolsky.

Management of Allergic Infantile Eczema; Demonstration of Testing and Natural Color Lantern Slides—Lee Bivings.

Operative Clinic; Hernia—J. A. McAllister.

Injuries to the Chest—Dan C. Elkin.

Mammary Gland Diagnosis—J. L. Campbell.

Indications for Splenectomy, With Report of a Case of Thrombopenic Purpura—L. W. Grove.

Unusual Cases of Hypothyroidism—Hal M. Davison.

Treatment of Fissure in Ano.—C. E. Hall, Jr.

Lung Abscess—C. C. Aven.

Ascites—H. L. Treusch.

Orbital Tumors—Grady E. Clay.

Prostatitis and Prostatic Hypertrophy—S. J. Sinkoe.

Treatment of the Senile Skin—H. S. Alden.

Measles Prevention, With Parent's Blood—W. W. Anderson.

Medical Clinic—C. W. Strickler.

Use and Misuse of Diabetic Foods—J. E. Paullin.

Pruritis Ani—Cosby Swanson.

Prevention of Deformities in Children—Theodore Toepel.

Diagnostic Errors in the Acute Abdomen—A. O. Linch.

Treatment of Infection of the Hand, With Reference to the Preservation of Function—J. D. Martin.

Further Observations in the Management of the Menopause—Jackson Landham.

Bronchoscopy and Esophagoscopy; Moving Pictures—M. S. Equen.

Endocrine Factors Influencing Growth—J. K. Fancher.

The Diagnosis and Treatment of Coronary Artery Disease—Evert A. Bancker, Jr.

Differential Diagnosis of Dysentery, With Further Observation on the Treatment of Amebic Dysentery—Mark S. Dougherty, Jr.

Tuberculosis in Children—W. L. Funkhouser.

Caesarean Section; Moving Pictures—T. C. Davison.

Bismuth in Syphilitic Cardio-Vascular Disease—L. Minor Blackford.

Some Problems of the Female Pelvis; Lantern Slides—D. Y. Sage.

The Management of the Chronic Dyspeptic—H. C. Sauls.

Persistent Vomiting; Types and Management—John B. Fitts.

Diagnosis and Treatment of Intestinal Obstruction—O. B. Bush.

Diet in Dermatology—Howard Hailey.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Association of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

MAY, 1931

ROENTGENOLOGY, A BRANCH OF THE PRACTICE OF MEDICINE

The Council on Medical Education and Hospitals of the American Medical Association defines radiology as, "the *branch* of medicine which deals with the diagnostic and therapeutic application of radiant energy," and a roentgenologist as "a *qualified physician* who has had adequate training and experience in the diagnostic and therapeutic application of roentgen rays." It further states that "roentgenography constitutes only a kind of medical examination."

Dr. William C. Woodward, Director of the Bureau of Legal Medicine and Legislation of the American Medical Association, has furnished the following information concerning the taking of x-ray pictures and the rendering of reports by x-ray technicians:

"If an individual not licensed to practice medicine does nothing else than render a diagnosis, by virtue of the Georgia Medical Practice Act (Clarks's Annotated Code of Georgia, Supplement 1922, Section 1697n) he is practicing medicine and subject to prosecution.

... The terms "practice of medicine," as used in this article are hereby defined to mean holding one's self out to the public as being engaged within this state in the diagnosis or treatment of disease, defects or injuries of human beings, . . . with the intention of receiving therefor, either directly or indirectly, any fee, gift or compensation whatsoever, or the maintenance of an office for the reception, examination and treatment of any person suffering from disease, defect or injury of body or mind. . . .

"There is comparative unanimity among the reported American decisions as to what acts constitute a diagnosis. In brief, the cases declare that a diagnosis consists of a recogni-

tion of disease or defects from their symptoms, not only in recognizing that the disease or defect exists, but in determining what disease or what defect is present. [See *People vs. Jordan* (Calif.), 156 Pac. 451, *Board of Medical Examiners vs. Freenor* (Utah), 154 Pac. 941, *People vs. Willis* (Calif.), 217 Pac. 771, and *Martin vs. Baldy* (Pa.), 94 Atl. 1091.]

"If in delivering a film to a referring physician, a technician merely calls the physician's attention to shadows and lights on the film, and leaves the physician to draw his own inferences, then it does not seem as though the acts would constitute a diagnosis. However, if he states his opinion of the abnormality or defect revealed by the film, either to the patient or to the referring physi-

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.

cian, he is diagnosing within the meaning of the Georgia Medical Practice Act.

"The fact that he refers to the written reports as 'opinions' or 'descriptions' of films, and not as diagnoses, the terminology employed by the technician to designate that activity will not affect its being regarded in law as a diagnosis (See *Board of Medical Examiners vs. Freenor* (Utah), 154 Pac. 941)."

MOUTH WASHES

In view of the present widespread publicity being given to "so-called" antiseptic mouth washes, it is well to keep in mind their chemical composition and their lack of antiseptic value. Two of those most widely exploited are "Listerine" and "Pepsodent Antiseptic".

A recent report¹ from the chemical laboratory of the American Medical Association shows: "the composition of Listerine is essentially that of a solution containing 25 per cent of alcohol, 2.4 per cent of boric acid,



G. Y. MOORE, Cuthbert
President 1930-31



ARTHUR G. FORT, Atlanta
President-Elect 1930-31

0.4 per cent of benzoic acid, with aromatic substances, chiefly thymol, (about 0.75 per cent-". . . "Four hundred and ninety-five dollars' worth of Listerine has the antiseptic action of a cent's worth of corrosive sublimate; or fifteen dollars' worth of Listerine equals a cent's worth of carbolic acid." . . "If a physician desires to prescribe a complex weakly antiseptic mouth wash—and this is not recommended—he has at his disposal the well-known and non-secret Antiseptic Solution N. F. (Liquid Antisepticus)".

Pepsodent Antiseptic[®] contains 25 per cent alcohol, 10 per cent glycerine, 10 per cent boric acid, 0.2 per cent chlorthymol, 0.2 per cent benzoic acid and traces of citric acid, tartaric acid, flavor and coloring matter. "The phenol coefficient of Pepsodent Antiseptic is ridiculously low: 0.15."

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2. Queries and Minor Notes: Pepsodent Antiseptic, J. A. M.A. 96:1333 (April 18), 1931.

THE AMERICAN COLLEGE OF PHYSICIANS

The fifteenth annual clinical session of the American College of Physicians met in Baltimore, Maryland, from March 23 to March 27, inclusive, and for one day following this, in Washington, D. C.

The College has, during the fifteen years of its existence, increased to a membership of 2300, and 366 new Fellows were inducted into the College during this meeting. The attendance was exceedingly good, 1800 members being present.

As one might expect, Baltimore proved to be a wonderful host in every sense of the word. Every medical institution of note combined with the state and local medical societies to make the meeting a great success.

With the exception of the entertainment given to the visiting ladies and the annual banquet of the College, the entire meeting was of a scientific nature.

The annual banquet was held on Thursday evening, March 26, in the Lord Baltimore Hotel. The banquet hall was filled, there being over 800 present. Dr. Lewellys F. Barker was toastmaster, and gave his usual

delightful exhibition of entertainment in the best possible English. Dr. William H. Welch delivered the address of the evening. He gave a mixed humorous and scientific speech, discussing various phases of the practice of medicine, especially describing the requirements for a medical clinic. Dr. Welch was given a great reception by everyone present.

The general sessions opened on Monday and continued through Friday in Baltimore. There was a great variety of papers by eminent physicians from different parts of the entire country.

There was a symposium on gastro-intestinal diseases, with an outstanding paper on gastric secretion, reporting a study of the electrolytic changes in the gastric juice during different phases of secretion, in connection with the simultaneous, corresponding changes in the blood and urine. This paper was given by Dr. Lay Martin.

In the symposium on cardiac diseases, the paper of perhaps greatest interest was on the therapeutic use of oxygen in cardiac disease, by Dr. Alvan L. Barach, of New York. He reported the building of an oxygen chamber with the use of material that allowed the passage outward of carbon dioxide but not of oxygen. This allowed the concentration of oxygen in the chamber to be kept at any desired density. All cases of cardiac decompensation who were treated by this method received great benefit, and it had proven a valuable adjunct to other treatment. The benefit in severe cases, however, lasted only a short time. In some lighter cases, it lasted for weeks or even a few months. The method, at present, is so expensive that it is not of practical use in the general hospital.

Dr. William S. McCann discussed the many-sided question of proteid in nephritis, and advised the administration of sufficient proteid to keep the body in a state of proteid balance in those cases of nephritis excreting large amounts of proteid.

Colonel Charles F. Craig, of the U. S. Army, Washington, D. C., reported the development of the complement fixation test in the diagnosis of amoebiasis. This test has been put on a practical basis, but the necessary reagents are not yet available to the profession.

Dr. Ray M. Balyeat, of Oklahoma City, read an extremely interesting paper on allergic migraine, reporting the results of a study of 202 consecutive cases. A large percentage of these cases gave definite reaction to allergens, mostly foods. The migraine could be produced at will by the administration of these foods.

In the symposium on anemia, an excellent paper was presented by Dr. Stewart R. Rob-

erts and Dr. Roy R. Kracke. This paper discussed the leukopenic trend found in the South as shown by 8000 blood counts.

Dr. R. A. Yern, of Philadelphia, showed that diet is a factor of marked importance in the etiology of anemia. Drs. Minot and Castle, of Boston, discussed the adequate treatment of anemia, showing the results by different methods. One of the most interesting facts brought out in this paper was that some cases of secondary anemia that do not improve upon the administration of iron and proper diet do improve after the administration of either liver or liver extract is added to the treatment. Also, some cases of pernicious anemia that do not improve after the administration of liver diet do improve when iron is administered along with the liver.

There were many other papers, excellent in every detail, which we have not space to discuss.

In addition to the scientific program given at the regular meeting of the College, there were excellent clinics at every medical institution of note in the city, the majority of the clinics being at Johns Hopkins University. Clinics varied from ward walks, clinico-pathological conferences and medical clinics on various subjects, to extremely scientific demonstrations of different types of experimental work being carried on in the University. These clinics included almost every subject of interest in medicine. Some of the programs were repeated on different days, so that physicians unable to attend them on one day might do so on another.

Included in these clinics was a program by the Institute of the History of Medicine, under Dr. William H. Welch. There was shown daily through the courtesy of the Institute of the History of Medicine the Harvey Film, which illustrates the clinical experiments which led Harvey to the discovery of the circulation of the blood.

The clinics were continued for the last day of the meeting by the institutions in Washington, D. C., the Army and Navy Medical School, the Walter Reed Hospital, St. Elizabeth's Hospital, Veterans' Bureau, the Smithsonian Institute, George Washington University, Children's Hospital, and Georgetown University.

There is no doubt that a meeting such as this one offers a great opportunity for increasing one's knowledge in medicine. We feel that every physician who is eligible for membership would do well to become a member of the American College of Physicians and attend these meetings.

HAL M. DAVISON, M. D.

WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA OFFICERS

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WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION

Ninth Annual Meeting

PHILADELPHIA, JUNE 8-12, 1931

Headquarters, Bellevue-Stratford Roof Garden.
Registration Hours, Daily 9 A.M. to 5 P.M.

*(All Meetings Will Begin Precisely at the Hour
Indicated. Please Be Prompt.)*

PROGRAM*

MONDAY, JUNE 8TH

- 12:30 P.M. In Honor of National Presidents,
1922-1932
Buffet Luncheon, Subscription,
.....Roof Garden
2:00 P.M. Three Round Tables, 35 minutes
each, 10 minute intermissions.
.....Roof Garden

Subjects

1. Programs for County Auxiliary Meetings.
2. The Technique and Value of a Committee on Public Relations.
3. History and Archives.

- 6:30 P.M. Board Dinner, Subscription Red Room
7:30 P.M. Board MeetingRed Room
TUESDAY, JUNE 9TH

- 9:00 A.M. General MeetingRoof Garden
12:30 P.M. Luncheon (Bellevue Special),
.....Roof Garden
1:30 P.M. *Bus Trip to Valley Forge.
Tea in Log Cabin.
Hostesses: Berks, Chester, Dela-
ware, and Montgomery Co., Pa.,
Auxiliaries.

or

- 1:30 P.M. *Boat Trip on Delaware River,
Tea on Board.
Hostesses: Bucks Co., Pa., Bur-
lington, Camden, and Gloucester
Co., N. J., Auxiliaries.

or

- 2:00 P.M. Visit to Historial Society of
Pennsylvania. 1300 Locust Street.
Special Docent Service.

*All women attending the Convention, whether Auxiliary Members or not, are invited to participate in this entire program.

Brief Address by Dr. Charles W.
Burr of Philadelphia: "The Daily
Life of the Colonial Physician."

Special Exhibitions on View Throughout the Convention

- 8:00 P.M. General Meeting of A. M. A.,
.....Academy of Music
10:00 P.M. Supper Dance.....Bellevue Ball Room
Hosts: The Philadelphia County
Medical Society.

WEDNESDAY, JUNE 10TH

- 9:00 A.M. General Meeting and Election,
.....Roof Garden
12:30 P.M. Auxiliary Luncheon, Subscription,
.....Rose Garden
Guests and Speakers from A.M.A.
Music by Courtesy of the Dela-
ware State Auxiliary.
2:30 P.M. Bus Trip Through Historic Phila-
delphia, Fairmount Park and Ger-
mantown.
Hosts: The Philadelphia County
Medical Society.
Tea at "Stenton".
Hostesses: New Jersey State
Auxiliary.

- 8:30-11 P.M. Auxiliary Reception,
.....University Museum
Hostesses: Pennsylvania State
Auxiliary.

Music—Special Docent Service.

THURSDAY, JUNE 11TH

- 9:00 A.M. Board Meeting.....Red Room
10:00 A.M. Meeting for All State and County
TreasurersRoof Garden
10:30 A.M. General Round Table.....Roof Garden
Subject: "What Have I Gotten
Out of the Convention?"
Opening of Question and Sugges-
tion Box.
12:00 M. Luncheon (Bellevue Special),
.....Roof Garden
1:00 P.M. *Bus Trip, "Longwood."
Estate of Mr. and Mrs. Pierre S.
duPont.

or

- 2:30 P.M. *Visit to Fairmount and Rodin
Museums.
Special Docent Service.

- 9:00 P.M. President's Ball,
.....Benjamin Franklin Ball Room

Hosts: American Medical Association.

FRIDAY, JUNE 12TH

9:30 A.M. †Bus Trip to Atlantic City, including Visit to Convention Hall, Ride in Wheel Chair (one hour). Luncheon at the Claridge. Atlantic City Auxiliary in Charge. Return at 5 P.M. or 10 P.M.

or

11:00 A.M. Trip Through Wanamaker's with Luncheon in Crystal Tea Room.

*Bus transportation paid by members.

†Inclusive price \$5.00.

"AS YOU LIKE IT"

Daily from 9:00 A.M. to 5:00 P.M., arrangements may be made at this Booth in the Roof Garden for golf, shopping, or any special trips desired; e.g., Historic Churches, Fairmount Park Mansions, Suburban Gardens, etc.

All tickets and invitations must be *procured in advance* in the Bellevue Roof Garden. Only programs will be obtainable elsewhere.

WHAT OUR MEDICAL AUXILIARY SHOULD MEAN TO US*

MRS. J. C. BENNETT
Jefferson

In the first place, it would be well to ask ourselves why we are members of the Medical Auxiliary. We should belong to the Auxiliary because—

We believe that our husbands' profession is one of the finest in the world; almost the greatest work a man can do. We should wish to back them in their work, to which they give their lives.

Even if we belong to many other organizations, I believe that first we should center our interests and energies on the work which is nearest our homes and our hearts, because our positions as doctors' wives surround us with opportunities for investigation of the health question, and an understanding of that problem which perhaps others may not have.

Through the Auxiliary we may become the friend of any doctor's wife, not only of our state but of our country, and thus enrich our lives. We should be members of the Auxiliary because we accept the following statement that, "Each succeeding generation of the race is the beneficiary of the care bestowed by the womanhood of the generation before it". And we should wish to carry on. The principal function of our

Auxiliary should mean to us education of the public in health matters. But doctors' wives cannot educate others until they have educated themselves. The first work, therefore, for the members of a state or county Auxiliary should be self-education through reading and study programs.

One of the best fields for educational work for health open to our Auxiliary lies in women's clubs.

Doctors' wives who have made themselves intelligent about public health principles, and informed about scientific methods of disease prevention, are always being sought for chairmanships and public health committees in parent-teacher associations and women's clubs.

These positions offer opportunities for health education which should be welcomed by Auxiliary members. We often wonder in our County Auxiliary what we can do without the finances needed.

A County Auxiliary could put on study programs covering the fundamentals of personal and public hygiene. Study our local health conditions. Study our own county official and non-official machinery for disease prevention and health promotion.

Where we have no full time county health department, ask the State Health Department to tell us what the county needed and what we could do to improve conditions, and then follow their directions.

The rural health problem could be solved better with a county health nurse.

Then it is necessary to push the extension of Hygeia with other matters of health education, especially in every rural school and district.

The study of Health should be a part of every school curriculum and an annual physical examination for every child, not just those in the larger cities.

Annual physical examinations for adults as well as children should be urged.

It would be well for the Auxiliary members to set the example by starting on themselves first.

Texas, the mother of our Medical Auxiliary, has added the birthday feature to physical examination program. Have the secretary to enroll the birthday of each member, then the week of the birthday, set a definite time for the examination, which is so easily postponed when one is apparently well. The secretary sends a birthday card as a reminder of the occasion.

The president of a Texas Auxiliary related her experience in connection with her thorough examination. Her birthday was in September and the first meeting of her local Aux-

*Read before the Woman's Auxiliary at the Ninth District Meeting, Gainesville, Ga., March 18, 1931.

iliary was early in October. Naturally she said she wanted to help raise the number of examinations to be reported at that meeting, so she said she went down expecting to be told that she was a perfect specimen of healthy womanhood; said she couldn't have felt better. Imagine her surprise when a lump in the breast was found. A decision to operate at once met with enthusiastic readiness on her part. The tissue examination determined that it was not a malignancy, but she said one could readily understand her gratitude to the physical examination.

As members of the Medical Auxiliary our task is indeed one of tremendous magnitude, requiring much labor and self-sacrifice. But a large health foundation may grow out of the seeds we are sowing.

By joining hands in this lofty enterprise we can help build a paved highway to health and happiness. With the physicians as our teachers, their wives the messengers, our press the promoter, our clubs the salesmen, and our influential men and women the capitalists.

We may be charged with being dreamers, but history proves that "the onward march of science, religion and civilization has been led by dreamers." After all, the real quest in life is service.

Service is the keynote of our work, and is perhaps the greatest thing in human life.

To serve, and to be of service—what other opportunity affords so great a degree of personal satisfaction?

Therefore, our Auxiliary should mean to us—A service of love.

FIRST DISTRICT MEETING

A very delightful and interesting meeting of the Women's Auxiliary to the First District Medical Society was held in Millen, March 26, 1931, at the same time as the meeting of the visiting society. Mrs. L. F. Lanier, District President, opened the meeting. A charming address of welcome was given by Mrs. Cleveland Thompson, of Millen. The response was made by Mrs. H. W. Doster, of Rocky Ford. Mrs. Lee Howard, of Savannah, Acting Secretary Pro-Tem, in the absence of Mrs. Nevill, of Brooklet. Mrs. William Shearouse, of Savannah, Chairman of the Students Endowment Fund, told of the work of the committee.

A very interesting paper on Communicable Diseases and Their Prevention was read by Mrs. V. H. Bassett, of Savannah.

An enjoyable feature of the program was a group of solos by Mrs. Perkins, of Metter, accompanied by Mrs. Cleveland Thompson.

The members were urged by Mrs. W. H.

Myers to attend the State Convention, to be held in Atlanta in May.

Following the business meeting, a delightful barbecue was enjoyed, after which Mrs. Ralston Lattimore gave a very interesting talk on organization.

Among those present were, Mrs. L. F. Lanier, Sylvania; Mrs. H. W. Doster, Rocky Ford; Mrs. Ernest Downing, Newington; Mrs. E. C. Watkins, Brooklet; Mrs. A. J. Mooney, Mrs. Waldo Floyd, and Mrs. R. L. Cone, Statesboro; Mrs. R. L. Kennedy, Metter; Mrs. Cleveland Thompson, Mrs. Mark Perkins, Mrs. H. G. Lee, Mrs. Q. A. Mulkey, Mrs. G. Lunsford, of Millen; Mrs. W. H. Myers, Mrs. Ralston Lattimore, Mrs. V. H. Bassett, Mrs. William Shearouse, Mrs. Julian Quattlebaum, Mrs. J. C. Metts, Mrs. A. A. Morrison, Mrs. E. N. Gleaton, Mrs. Hugo Johnson, Mrs. O. W. Schwalb, Mrs. Lee Howard, Mrs. L. W. Williams, and Mrs. E. M. Baker, Jr., all of Savannah.

MARY BAKER, *Recording Secretary*.

NINTH DISTRICT MEETING

The Auxiliary of the Ninth District Medical Association held its semi-annual session at the Wheeler Hotel, in Gainesville, March 18, 1931, with Mrs. C. B. Almond, District Manager, presiding.

Lord's Prayer in concert.

Welcome Address—Mrs. J. H. Downey, Gainesville.

Response—Mrs. C. L. Ayers, Toccoa.

Vocal Selections from Schubert's Serenade and Il Trovatore—Mesdames Ashford and Carl Romberg, Gainesville.

"What Our Auxiliary Should Mean to Us"—Mrs. J. C. Bennett, Jefferson.

"Tuberculosis"—Dr. M. F. Haygood, Superintendent, Alto Sanatorium.

Violin Solo, Raff's Cavatina—Mrs. John Woodcock, accompanied by Mrs. Pierpont Brown, Gainesville.

The minutes of previous meeting were read and adopted.

Old Business—Mrs. Almond asked that members send clippings for the Ninth District Scrapbook to the Historian, Mrs. S. T. Ross, Winder.

Mrs. J. H. Downey, Gainesville, and Mrs. W. H. Garrison, Clarkesville, Alto Shrubbery Committee Chairmen, reported that since the Ninth District Medical Auxiliary wanted to do something definite for the grounds at Alto. Dr. M. F. Haygood, Superintendent, had suggested that we contribute \$27.00 for the purchasing of low shrubs for the planting of the Martha Dwellie Memorial Playground, and high shrubs for obscuring a cemetery near

the hospital. Mrs. W. H. Garrison, Clarkesville, made a motion that was seconded by Mrs. C. L. Ayers, Toccoa, that we comply with Dr. Haygood's suggestion. Motion carried.

Mrs. W. H. Garrison, Clarkesville, Chairman, reported that if County Auxiliaries wanted to do something for the Sanatorium, that radi-cut garments would be sent them for making.

New Business—Mrs. E. M. McDonald, Jefferson, made a motion that since Mrs. J. C. Bennett's paper was so splendid that it be sent to the Journal of the Medical Association of Georgia for publication. This motion was seconded by Mrs. Ralph Freeman, Hoschtion, and carried.

Constitution and By-Laws were amended so that Chairman and Secretary serve two years instead of one.

Mrs. W. H. Garrison, Clarkesville, made a motion that Ninth District Medical Auxiliary year coincide with state convention year. Mrs. W. B. Chandler, Baldwin, seconded it and motion was adopted.

In response to roll call, reports were given from Barrow, Cherokee, Pickens, Habersham, Hall, Jackson, and Stephens Counties.

Reading of communications.

Election of officers.

Mrs. C. L. Ayers, Toccoa, Chairman.

Mrs. E. M. McDonald, Jefferson, Vice-Chairman.

Mrs. W. H. Garrison, Clarkesville, Secretary.

Mrs. J. C. Bennett, Jefferson, Parliamentarian.

Time and place of next meeting, September 16, 1931, at Canton, Ga.

Mrs. E. R. Harris, Winder, offered a resolution of thanks for the royal entertainment of the Gainesville Auxiliary. Mrs. Horace Crowe, Talmo, made a motion that resolution be adopted, and it was unanimously carried.

MRS. C. B. ALMOND, *Chairman*.

MRS. E. R. HARRIS, *Sec. Pro-Tem*.

TENTH DISTRICT MEETING

The first meeting of the Tenth District Medical Auxiliary met in the Woman's Club House at Augusta, on February 25, 1931. In the absence of the President, Mrs. Dillard, who was detained by illness, Mrs. S. T. R. Revell, State Vice-President, presided.

The assembly was welcomed to Augusta by the President of the Richmond County Auxiliary, Mrs. W. C. Kellogg. The response to the address of welcome was delivered by Mrs. John Lewis, of Louisville.

Greetings were read from Mrs. Harrold and Mrs. Lattimore.

A talk on health problems was given by Mrs. Revell.

A report of the work of the Richmond County Woman's Auxiliary for the year 1929-30 was read by Mrs. W. W. Battey.

A constitution was adopted.

The Richmond County Auxiliary entertained the visiting ladies with a most beautiful luncheon at the Woman's Club House and Mrs. R. W. Soper gave a tea for the members of the Auxiliary at her home on the Lenwood Reservation.

BOOKS RECEIVED

Discovering Ourselves—A View of the Human Mind and How It Works. By Edward A. Strecker, M.D., and Kenneth E. Appel, M.D. Some of the questions answered in this book are: Is it necessary to go through life the victim of some simple complex, the cause of which may be discovered and removed? What are complexes and inhibitions? Why do some individuals succeed in the face of overwhelming difficulties while others fail? Why do crowds depress some, but stimulate others? Contains 306 pages. Publishers: The Macmillan Company, 60 Fifth Avenue, New York City. Price \$3.00.

The Diagnosis and Treatment of Brain Tumors. By Ernest Sachs, M.D., Professor of Clinical Neurological Surgery, Washington University School of Medicine, St. Louis. Contains 396 pages with 224 illustrations, including ten in colors. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Mo. Price \$10.00.

Crippled Children—Their Treatment and Orthopedic Nursing. By Earl D. McBride, M.D., Instructor in Orthopedic Surgery, University of Oklahoma School of Medicine; Attending Orthopedic Surgeon to St. Anthony Hospital; Associate Orthopedic Surgeon to Oklahoma City General and Wesley Hospitals; Visiting Surgeon to W. J. Bryan School for Crippled Children; Chief of Staff to Reconstruction Hospital, Oklahoma City, Okla. Contains 280 pages with 159 illustrations. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Mo. Price \$3.50.

Quantitative Clinical Chemistry. Vol. I—Interpretations. By John P. Peters, M.D., Professor of Internal Medicine, Yale University School of Medicine; and Donald A. Van Slyke, Ph.D., Sc.D., Member of the Rockefeller Institute of Medical Research. Contains 1264 pages. Publishers: The Williams & Wilkins Company, Baltimore, Md.

Problems and Methods of Research in Protozoology. Edited by Robert Hegner, M.D.; Professor of Protozoology; and Justin Andrews, M.D., Associate in Protozoology in the Johns Hopkins University School of Hygiene and Public Health. Contains 532 pages. Publishers: The Macmillan Company, 60 Fifth Avenue, New York City.

GEORGIA STATE NURSES ASSOCIATION

Officers

President—Miss Lucia Massee, R. N., Cuthbert
 First Vice-President—Miss Dora A. Kershner, R. N., Macon.
 Second Vice-President—Mrs. Mae M. Jones, R. N., Milledgeville.
 Secretary—Miss Winnie B. Wood, R. N., Macon.
 Treasurer—Miss Jane Van De Vrede, R. N., Atlanta.
 Miss Jane Van De Vrede, R. N.
 Executive Secretary

District Presidents

First—Mrs. Dorothy Treagle, R. N., Savannah.
 Fourth—Miss Eva Chalkley, R. N., Columbus.
 Fifth—Mrs. Sue B. Paille, R. N., Atlanta.
 Sixth—Miss Dora A. Kershner, R. N., Macon
 Seventh—Miss Shirley Hamrick, R. N., Cedartown.
 Eighth—Mrs. W. C. Thurmond, R. N., Athens.
 Ninth—Miss Ruby Falls, R. N., Gainesville.
 Tenth—Mrs. Joseph Akerman, R. N., Augusta.

Headquarters

131 Forrest Avenue, N. E., Atlanta.

WINNER OF THE WALTER BURNS SAUNDERS MEDAL

Mary Sewell Gardner, R. N., of Providence, R. I., pioneer public health nurse, public health nursing consultant, author and lecturer, was awarded the Walter Burns Saunders' medal "For Distinguished Service in the Cause of Nursing", at an open meeting of the Advisory Council of the American Nurses' Association, held at Shrine Mosque, in conjunction with the evening meeting of the convention of the National League of Nursing Education, in Atlanta, May 4th. Dr. Allen H. Bunce, Trustee of the American Medical Association, Secretary of the Medical Association of Georgia, and Editor of the Journal of the State Medical Association, made the award, naming Miss Gardner "as the most outstanding public health nurse in the world today." Dr. Bunce was introduced by Jane Van De Vrede, R. N., first vice-president of the American Nurses' Association, who presided over the Council. Miss Van De Vrede paid tribute to Miss Gardner, explaining that the Committee to Award, composed of Miss Elnora Thomson, president of the A. N. A.; Miss Elizabeth C. Burgess, president of the National League of Nursing Education; Miss Sophie C. Nelson, president of the National Organization for Public Health Nursing, and Mr. Saunders, felt that Miss Gardner "represents in her work, the entire growth of the public health movement, of which she has been a leader from its inception."

Born in Newton, Mass., and educated in the private schools of Connecticut, Miss Gardner became director of the Providence District Nursing Association immediately after graduation from nurse training.

When the United States entered the World War, she was given a leave of absence in order that she might become Director of the



MISS MARY SEWELL GARDNER, Providence, R. I.
 Recipient of the Walter Burns Saunders Medal for
 distinguished service in the cause of nursing—1931.

Bureau of Public Health Nursing in the American Red Cross. Later she became Director of the Nursing Division of the Tuberculosis Commission to Italy of the American Red Cross. In 1921 the Red Cross commissioned Miss Sewell to study public health nursing in connection with the child welfare units of Europe, and in every European

country she met with staff nurses of the A. R. C.

Positions of leadership in national and international nursing have been held by Miss Gardner. From 1913-16 she was president of the National Organization for Public Health Nursing, and Consultant-Director of the Henry Street Nursing Service, New York City, in 1924-25. She is honorary president of the N. O. P. H. N.

She is a lecturer on public health nursing in the Department of Nursing, Teachers' College, Columbia University. One of the most important positions held by Miss Gardner is that of Chairman of the Committee on Public Health Nursing of the International Council of Nursing. Her textbook on Public Health Nursing has been translated into a number of foreign languages.

Miss Gardner received a Master's degree from Brown University in 1918, and in making the award, President Faunce said in part: "To Mary Sewell Gardner—pioneer in making the care of the sick an honored profession; superintendent of the Providence District Association; director of public health under the Red Cross; a gentlewoman whose writings and whose example have brought us healing of the body and inspiration of the spirit."

MISS JANET M. GEISTER DISCUSSES

Costs of Nursing Care

Miss Janet M. Geister, director at headquarters of the American Nurses' Association, who was in Atlanta to attend the convention of the National League of Nursing Education, at the Biltmore Hotel, May 4-9, and to be present at meetings of the Advisory Council of the American Nurses' Association, says that a paradoxical situation in nursing has been developing for some years. "Everywhere we hear of the high cost of nursing service, and everywhere we hear of unemployment among private duty nurses. The effects of the stock market fluctuation and the ever-increasing number of private duty nurses have combined to create a peak in nurses' employment," said Miss Geister.

"Mr. Small-Salaried-Man belongs to that middle conditioned group that seems to be in especial need of care. The poverty group now can obtain what nursing care it needs through various health agencies. The wealthy can purchase care in whatever amount it wants. But Mr. Middle-Man cannot afford nursing service today unless he is very ill.

"Organized nursing is reaching out to

answer the needs of the moderately conditioned group. All through this country persons are commenting unfavorably on the necessity of paying from six to eight dollars a day for the services of a nurse; on the other hand, the average income of the private duty nurse is only \$1,315.00."

Miss Geister says there is a maladjustment of nursing service in every community, practically—groups of nurses waiting for work and groups of persons not now receiving the skilled nursing care they need because they cannot afford to pay for it.

As a first step toward improving conditions for the nurse and for the modestly salaried patient alike, Miss Geister told of the study being made by the American Nurses' Association in regard to the functions of nurses' registries, and of the success of hourly nursing service, by means of which a patient may secure the services of a nurse, not by the day, but in terms of his needs.

"Primarily it is the patient of whom all nurses are thinking. There is every indication within a very few years the time will have passed when the bank clerk and the school teacher go without the nursing care they need, while around the corner lives a nurse who is waiting at the telephone for a call to duty. If she becomes an hourly nurse, she will work on a full-time salaried basis through the Nurses' Registry, administering to the needs of several persons each day, and Mr. Middle-Man will have the nursing service he needs. And the day of waste in private duty nursing will be over."

Miss Geister's first experience, after graduation from the Elgin, Ill., Hospital Training School for Nurses, was in private duty. Later she secured experience in public health nursing through the Visiting Nurse Association of Chicago, and as an industrial nurse in the stock yards, becoming an authority in industrial nursing. As such she was employed by the National Organization for Public Health Nursing, with headquarters in New York; after which she did research work in connection with the New York Dispensary and Clinic, of which Dr. Michael Davis was director.

About five years ago she was secured by the American Nurses' Association to direct the activities of that organization.

Special mention was made at the meeting of the National League of Nursing Education of the cooperative relations established between the physicians and nurses of the state of Georgia, and the necessity for interpreting the public by the professions of the aims and ideals included in the education and service of the nurse.

COUNTY SOCIETIES

1931 HONOR ROLL*

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 4, 1930.
2. Butts County, Dr. Robert L. Hammond, Jackson, December 2, 1930.
3. Monroe County, Dr. G. H. Alexander, Forsyth, February 18, 1931.
4. Ware County, Dr. Kenneth McCullough, Waycross, March 27, 1931.
5. Tri Counties Medical Society, Dr. W. O. Shepard, Bluffton, April 15, 1931.
6. Elbert County, Dr. Guy C. Hewell, Dewey Rose, April 18, 1931.
7. Upson County, Dr. R. L. Carter, Thomaston, April 27, 1931.

*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

NEW MEMBERS 1931

Adams, Thomas M., Montezuma.
 Booth, William T., Emory University.
 Chappell, R. J., Dudley.
 Cochran, A. H., Norcross.
 Cochran, Hugh, Atlanta.
 Evans, E. L., Tifton.
 Fleming, C. A., Tifton.
 Gay, T. Bolling, Atlanta.
 Hendricks, W. H., Tifton.
 Hunter, Conway W., Atlanta.
 Johnson, McClaren, Emory University.
 Jones, Francis, Atlanta.
 Jordan, W. P., Columbus.
 Knight, J. H., Eagan.
 Malone, O. T., Atlanta.
 McDuffie, H. F., Atlanta.
 Meredith, A. O., Hartwell.
 Odum, Walter W., Brunswick.
 Parham, J. B., Cornelia.
 Pittman, Carl S., Tifton.
 Rosenburg, H. J., Atlanta.
 Seawright, E. C., Fayetteville.
 Smith, Carter, Atlanta.
 Staton, T. R., Atlanta.
 Taylor, J. C., LaGrange.
 Thompson, D. O., Atlanta.
 Vineyard, T. L., LaGrange.
 Watson, Francis M., Atlanta.
 Willis, Tom Vann, Brunswick.
 Wood, James A., Atlanta.

COUNTIES REPORTING FOR 1931

Troup County Medical Society

The Troup County Medical Society announces the following officers for 1931:

President—C. W. Harvey, Hogansville.
 Vice-President—Joe E. Lane, LaGrange.
 Secretary-Treasurer—Frank J. Amis, Hogansville.
 Delegate—M. M. Byrd, West Point.
 Alternate Delegate—Joe E. Lane, LaGrange.

Censors—R. S. O'Neal, H. H. Hammett, and Frank J. Amis.

Chattooga County Medical Society

The Chattooga County Medical Society announces the following officers for 1931:

President—F. W. Hall, Summerville.
 Vice-President—W. J. Bryant, Summerville.
 Secretary-Treasurer—H. D. Brown, Summerville.
 Censors—B. F. Shamblin, R. N. Little, and N. A. Funderburke.

Dooly County Medical Society

The Dooly County Medical Society announces the following officers for 1931:

President—J. L. Lee, Pinehurst.
 Vice-President—W. N. Edenfield, Vienna.
 Secretary-Treasurer—F. E. Williams, Vienna.
 Delegate—E. B. Davis, Byromville.
 Alternate Delegate—H. A. Mobley, Vienna.
 Censors—V. C. Daves, H. A. Mobley, and O. W. Kitchens.

Crisp County Medical Society

The Crisp County Medical Society announces the following officers for 1931:

President—P. L. Williams, Cordele.
 Vice-President—W. A. Miller, Arabi.
 Secretary-Treasurer—J. N. Dorminy, Cordele.
 Delegate—Charles Adams, Cordele.
 Alternate Delegate—M. R. Smith, Cordele.
 Censors—Charles Adams, W. A. Miller, and H. J. Williams.

Bibb County Medical Society

The Bibb County Medical Society announces the following officers for 1931:

President—R. C. Goolsby, Jr., Macon.
 Vice-President—Thomas Harrold, Macon.
 Secretary-Treasurer—W. W. Chrisman, Macon.
 Delegate—C. L. Ridley, Macon.
 Delegate—James A. Fountain, Macon.
 Censors—F. L. Webb, O. H. Weaver, and I. H. Adams.

Hancock County Medical Society

The Hancock County Medical Society announces the following officers for 1931:

President—Horace Darden, Sparta.
 Secretary-Treasurer—H. L. Earl, Sparta.
 Delegate—C. S. Jernigan, Sparta.
 Alternate Delegate—E. H. Hutchings, Sparta.

Wilkes County Medical Society

The Wilkes County Medical Society announces the following officers for 1931:

President—E. W. Ragsdale, Tignall.
 Secretary-Treasurer—H. T. Harriss, Washington.

Ben Hill Medical Society

The Ben Hill Medical Society announces the following officers for 1931:

President—A. Harper, Wray.
 Vice-President—Ralph E. Russell, Fitzgerald.

Secretary-Treasurer—L. S. Osborne, Fitzgerald.
 Delegate—G. W. Willis, Ocilla.

Walton County Medical Society

The Walton County Medical Society announces the following officers for 1931:

President—H. L. Upshaw, Social Circle.
 Vice-President—J. D. H. Day, Social Circle.
 Secretary-Treasurer—J. K. McClintic, Monroe.

Montgomery County Medical Society

The Montgomery County Medical Society announces the following officers for 1931:

President—H. C. Sharpe, Alston.
 Vice-President—J. H. Dees, Alston.
 Secretary-Treasurer—J. E. Hunt, Mount Vernon.
 Delegate—J. W. Palmer, Ailey.
 Alternate Delegate—J. H. Dees, Alston.

Screven County Medical Society

The Screven County Medical Society announces the following officers for 1931:

President—W. H. Bennett, Sylvania.
 Vice-President—A. B. Reddick, Sylvania.
 Secretary-Treasurer—L. F. Lanier, Sylvania.

Stephens County Medical Society

The Stephens County Medical Society announces the following officers for 1931:

President—W. H. Swain, Martin.
 Vice-President—J. H. Terrell, Toccoa.
 Secretary-Treasurer—C. L. Ayers, Toccoa.
 Delegate—E. F. Chaffin, Toccoa.
 Alternate Delegate—J. E. D. Isbell, Toccoa.
 Censors—J. E. D. Isbell, W. H. Swain, and W. B. Heller.

Laurens County Medical Society

The Laurens County Medical Society announces the following officers for 1931:

President—C. A. Hodges, Dublin.
 Vice-President—E. B. Claxton, Dublin.
 Secretary-Treasurer—O. H. Cheek, Dublin.
 Delegate—E. B. Claxton, Dublin.
 Alternate Delegate—R. J. Chappell, Dudley.
 Censors—E. B. Claxton, R. J. Chappell, and A. T. Coleman.

Lamar County Medical Society

Lamar County Medical Society announces the following officers for 1931:

President—C. H. Willis, Barnesville.
 Secretary-Treasurer—J. M. Rogers, Barnesville.
 Delegate—J. A. Corry, Barnesville.
 Alternate Delegate—C. H. Willis, Barnesville.

Tift County Medical Society

The Tift County Medical Society announces the following officers for 1931:

President—Carl S. Pittman, Tifton.
 Vice-President—C. A. Fleming, Tifton.
 Secretary-Treasurer—E. L. Evans, Tifton.

Macon County Medical Society

The Macon County Medical Society announces the following officers for 1931:

President—C. P. Savage, Montezuma.
 Vice-President—Charles A. Greer, Oglethorpe.
 Secretary-Treasurer—Thos. M. Adams, Montezuma.
 Delegate—Thos. M. Adams, Montezuma.
 Alternate Delegate—C. H. Richardson, Sr., Montezuma.

Hancock County Medical Society

The Hancock County Medical Society announces the following officers for 1931:

President—Horace Darden, Sparta.
 Secretary-Treasurer—H. L. Earl, Sparta.
 Delegate—C. S. Jernigan, Sparta.
 Alternate Delegate—E. H. Hutchings, Sparta.

Campbell County Medical Society

The Campbell County Medical Society announces the following officers for 1931:

President—T. P. Bullard, Palmetto.
 Vice-President—R. T. Camp, Fairburn.
 Secretary-Treasurer—A. J. Green, Union City.
 Delegate—W. R. Camp, Fairburn.

Ben Hill Medical Society

The Ben Hill Medical Society announces the following officers for 1931:

President—A. Harper, Wray.
 Vice-President—Ralph Russell, Fitzgerald.
 Secretary-Treasurer—L. S. Osborne, Fitzgerald.
 Delegate—G. W. Willis, Ocilla.

Toombs County Medical Society

The Toombs County Medical Society announces the following officers for 1931:

President—H. D. Youmans, Lyons.
 Secretary-Treasurer—William W. Odom, Lyons.
 Delegate—J. E. Mercer, Vidalia.
 Alternate Delegate—H. D. Youmans, Lyons.

Upson County Medical Society

The Upson County Medical Society announces the following officers for 1931:

President—F. M. Woodall, Thomaston.
 Secretary-Treasurer—R. L. Carter, Thomaston.
 Delegate—J. M. McKenzie, Thomaston.
 Alternate Delegate—J. E. Garner, Thomaston.
 Censors—B. L. Bridges, F. M. Woodall, and K. S. Williams.

DISTRICT SOCIETIES

MEETING OF SECOND DISTRICT MEDICAL SOCIETY

Bainbridge, Ga.

APRIL 10, 1931

The meeting was called to order by the President, Dr. W. A. Walker, at 2:30 p.m., Central time. Invocation by Rev. M. M. Marshall, of Bainbridge. Address of Welcome by Hon. Vance Custer. In this welcoming address, Mr. Custer gave a short history of Bainbridge and told of the many attractions contained therein, and after an expression of appreciation of the medical fraternity, welcomed them to Bainbridge. Re-

sponse to Address of Welcome by Dr. Walker in behalf of the Society.

It was a pleasure to welcome several visitors from our neighboring State of Florida, among whom was Dr. J. C. Davis, of Quincy, President of the State Society. Dr. G. Y. Moore, of Cuthbert, President of the Medical Association of Georgia, was also present.

The minutes of the last meeting were read by the Secretary and approved as read, after which the Scientific Program was immediately entered into.

The first paper on the program, "Hypertrophic Stenosis of the Pylorus," was read by Dr. J. C. Brim, of Albany. Those taking part in the discussion were Drs. Paullin, of Atlanta; Jenkins, Jarrell, Watt, Little, and Ferguson.

The second paper, entitled "Cholecystitis", was delivered by Dr. T. C. Davison, of Atlanta. Dr. Davison's paper consisted of a detailed report of the modern methods of diagnosis in cases of suspected gallbladder disease, with suggestions as to treatment in the different types. He showed a series of x-ray pictures of the gallbladder that had been subjected to cholecystography. This paper was not open for discussion.

The third paper on the program, entitled "Treatment of Hypertension", was delivered by Dr. J. E. Paullin of Atlanta. This paper, delivered in an attractive way without manuscript, was presented in a concise, clear, and consecutive manner, which made it very interesting. This paper was not open for discussion.

The fourth paper, delivered by Dr. S. E. Sanchez, of Barwick, on "The Therapeutic Use of Glucose", was discussed by Dr. T. C. Davison, of Atlanta, who stressed the use of glucose in surgical cases, both before and after operation.

"Eye Injuries" was the title of the fifth paper, which was delivered by Dr. John T. King, of Thomasville. This paper was discussed by Dr. H. M. Moore, Dr. C. B. Welch, Dr. I. W. Irwin, and Dr. O. G. Kendrick, of Tallahassee.

The final paper was delivered by Dr. M. A. Ehrlich, of Bainbridge, entitled "Impressions of the White House Conference on Child Health and Protection". This paper set forth the impressions gathered by Doctor Ehrlich, who attended the recent conference called by President Hoover in Washington. Doctor Ehrlich stated the dangers of State medicine and warned the Society about such steps as were being taken. At the conclusion, Doctor Ehrlich proposed that the Society pass a resolution recommending that the Society undertake an active campaign to instruct the public about matters of health and warn them against the cults.

Doctor Paullin made an announcement concerning the Calhoun Lectureship Fund.

Motion was made and seconded that we meet in the fall with the Eleventh District Medical Society in a joint meeting. This motion was lost.

A committee, consisting of Doctor Redfearn, of Albany; Doctor Chason, of Bainbridge, and Doctor Pitman, of Tifton, was then appointed to nominate officers for the ensuing year, to appoint members from the district to read papers at the next meeting and to

select the place of next meeting. Invitations from Thomasville, Edison, and Tifton were received for place of next meeting.

The meeting then adjourned for dinner and entertainment at the Sportsman Club, four miles out of Bainbridge. Here a delightful dinner and musical entertainment was enjoyed, after which the committee brought in its report as follows:

President—Dr. R. F. Wheat, Bainbridge.

Vice-President—Dr. J. V. Rogers, Cairo.

Secretary—Dr. C. H. Watt, Thomasville.

Place of Next Meeting—Tifton.

Papers to be read by:

Surgery—Dr. A. D. Little, Thomasville.

Medicine—Dr. C. K. Sharp, Arlington.

E. E. N. & T.—Dr. W. B. Smith, Tifton

Public Health—Dr. M. A. Fort, Bainbridge.

Pediatrics—Dr. S. L. Cheshire, Thomasville.

Reports adopted as read.

C. H. WATT, M.D.,

Secretary Second District Medical Society.

ELEVENTH DISTRICT MEDICAL SOCIETY

Meeting was held at Valdosta, Tuesday, April 14, 1931.

Called to Order—Dr. E. L. Jelks, Quitman, President.

Invocation—Rev. A. B. Lipscomb, Valdosta.

Welcome Address—Judge J. F. McCrackin, Valdosta.

Response—Dr. P. H. Askew, Nashville.

SCIENTIFIC PROGRAM

1. Certain Points on Acute Appendicitis—Dr. B. G. Owens, Valdosta.

Discussion—Dr. C. K. Wall, Dr. J. E. Gammons, Dr. B. G. Owens.

2. The Treatment of Chronic Eczema, With Special Reference to the Use of Sodium Thiosulphate—Case Reports—Dr. H. M. Tolleson, Hahira.

Discussion—Dr. W. F. Reavis, Dr. J. E. Penland, Dr. E. F. Thompson.

3. Surgery of the Prostate—Dr. C. K. Wall, Thomasville

Discussion—Doctor Moore, Dr. W. C. Hafford, Dr. W. F. Reavis, Dr. C. K. Wall.

4. Infectious Arthritis Deformans—Dr. Julian E. Gammon, Jacksonville, Fla.

Discussion—Dr. J. R. McMichael, Dr. J. E. Gammon.

5. Hypothyroidism: Some Unusual Types—Dr. Hal M. Davison, Atlanta.

Discussion—Dr. E. F. Thompson, Dr. H. M. Tolleson, Dr. A. H. Bunce, Dr. Hal M. Davison.

6. Optical Problems—Dr. E. F. Thompson, Valdosta.

Discussion—Dr. B. H. Minchew, Doctor Moore, Dr. E. F. Thompson.

7. Problems in Diagnosis—Case Reports—Lantern Slides—Dr. Allen H. Bunce, Atlanta.

Discussion—Dr. J. E. Gammon, Dr. W. F. Reavis, Dr. A. H. Bunce.

8. Findings in Pulmonary Tuberculosis—Dr. T. C. Williams, Valdosta.
 Discussion—Dr. H. G. Huey, Doctor Schenck, Dr. T. C. Williams.
 Dinner at Daniel Ashley Hotel. Guests of Lowndes Medical Society, 6:30 p.m.

W. F. REAVIS, M.D., *Secretary.*

Waycross, Ga.

NEWS ITEMS

Dr. and Mrs. W. H. Garrison, Clarkesville, entertained the members of the Habersham County Medical Society and the Woman's Auxiliary at their home on April 8th.

The Ware County Medical Society met at the Y. M. C. A. building on April 1st.

The Georgia Medical Society, Savannah, held its regular meeting on April 15th. Dr. Lawrence Lee read a paper, entitled "Myelogenous Leukemia—Report of Two Cases Treated With Benzol". Dr. C. F. Holton exhibited Pathological Specimens of Coronary Occlusions.

Dr. and Mrs. Earnest H. Hutchings, Sparta, entertained the members of the Hancock County Medical Society at dinner on April 2nd.

The Terrell County Medical Society met at the courthouse in Dawson on March 27th. Dr. W. P. Durham, Sasser, read a paper on "Apocynum". The discussion was led by Dr. J. G. Dean, Dawson, and Dr. J. H. Lewis, Dawson. Dr. Lucius Lamar, Dawson, gave case reports.

Dr. J. M. McElveen and Dr. E. C. Watkins, both of Brooklet, and Dr. C. E. Stapleton, Groveland, entertained the members of the Bulloch-Candler-Evans Counties Medical Society at a chicken dinner on April 8th. Dr. William H. Myers, Dr. Lee Howard, Dr. E. C. Demmond, A. A. Morrison, Julian K. Quattlebaum, all of Savannah, were guests at the meeting.

Dr. T. C. Davison, Atlanta, delivered an address before the Ten Club on the sixth floor of Davison-Paxon's Department Store on March 27th, entitled "Modern Advances in Medicine and Surgery". Mr. Raymond A. Kline was host.

Dr. Charles W. Crane, Augusta, has been elected Professor of Hospital Administration of the University Hospital, Augusta.

Drs. Richard Binion and W. M. Scott, Milledgeville, announce the opening of the City Hospital. Drs. Binion and Scott are owners of the institution and have equipped it with all modern conveniences. The hospital has two charity wards, large sun parlors, offices and private rooms, nurses' quarters, laboratory and x-ray equipment.

The members of the Brooks County Medical Society held Chest Clinics on April 9th and 10th in cooperation with representatives of the State Tuberculosis Sanatorium, Alto.

Emory University announces that two courses in health education methods will be given in its summer school—June 15th to July 21st. The university has secured Miss Mildred S. Manson as teacher. She has had experience in various fields as a high school teacher, elementary supervisor, county director of health education, director of tuberculosis clinic, and since 1927 has been director of health education of the Georgia and Atlanta Tuberculosis Associations. These courses have been planned for grade teachers, high school teachers, principals, superintendents and supervisors. The lectures will deal particularly with the theory and practical work in health problems as encountered in every-day school life.

Dr. Eugene B. Elder, formerly of Atlanta, and now serving as Superintendent of the Knoxville General Hospital, Knoxville, has been elected President of the Tennessee Hospital Association.

The Fifth District Medical Society held its semi-annual meeting at the Academy of Medicine and in the Conference Room of the Steiner Cancer Clinic, Atlanta, April 22nd. The scientific program consisted of the following titles for papers read at the morning meeting held at the Academy of Medicine: "Diagnosis and Management of Posterior Positions," Dr. R. A. Bartholomew, Atlanta; discussed by Dr. W. C. Goodpasture and Dr. C. W. Daniels, both of Atlanta. "Tetany Following Thyroidectomy," Dr. Ben H. Clifton, Atlanta; discussed by Dr. C. W. Roberts and Dr. Charles E. Waits, both of Atlanta. "Spinal Anesthesia," Dr. George Fuller, Atlanta; discussed by Dr. B. T. Beasley and Dr. Jesse H. York, Atlanta. "Ano-Rectal Fistula, Clinical Address," Dr. W. E. Person, Atlanta; discussed by Dr. Beecher DuVall, Dr. Marion C. Pruitt, and Dr. Charles E. Hall, Jr., Atlanta. "Common Sense Attitude Toward Psychoneurosis by General Practitioners," Dr. W. W. Young, Atlanta; discussed by Dr. Lewis M. Gaines and Dr. James N. Brawner, Atlanta. "Caesarean Section—Illustrated With Moving Pictures," Drs. T. C. Davison and J. Edgar Boling, Atlanta; discussed by Dr. Frank Eskridge and Dr. C. B. Upshaw, Atlanta. Afternoon meeting held at Steiner Clinic: "Symposium on Cancer," Dr. R. H. Fike and Dr. E. L. Bishop, Atlanta. "Head Injuries," Dr. E. F. Fincher, Jr., Atlanta; discussed by Dr. G. Hugh Cochran and J. Calvin Weaver, Atlanta. "Rupture of the Kidney—Report of Ten Cases—Illustrated With Lantern Slides," Dr. Earl Floyd, Atlanta; discussed by Dr. James L. Pittman, Jr., and Dr. W. A. Upchurch, Atlanta. "Rhinologist of Today," Dr. William C. Warren, Jr., Atlanta; discussed by Dr. J. Calhoun McDougall and Dr. Claude Griffin, Atlanta. "Treatment of Acute Emypema by Closed Tube Method—Case Reports—Illustrated," Dr. D. Henry Poer, Atlanta; discussed by Dr. Frank K. Boland and Lon Grove, Atlanta. Evening meeting at the Academy of Medicine: "Practical Management of Diabetes," Dr. Harold Bowcock, Atlanta; discussed by Dr. H. C. Sauls and Dr. V. E. Powell, of Atlanta. "Malnutrition in the Southern Child," Joseph Yampolsky, At-

lanta; discussed by Dr. William W. Anderson and M. Hines Roberts, Atlanta. "Injuries to the Chest," Dan C. Elkin, Atlanta; discussed by Dr. W. A. Selman and J. Gaston Gay, Atlanta. "Drugs Used in Circulatory Diseases," Dr. E. D. Shanks, Atlanta; discussed by Dr. J. E. Paullin and Dr. L. Minor Blackford, Atlanta. "Treatment of Fractures of the Femur," Dr. Lawson Thornton, Atlanta; discussed by Dr. T. P. Goodwyn and Dr. F. G. Hodgson, of Atlanta. "Removal of Foreign Bodies From the Food and Air Passages," Dr. Murdock Euen, Atlanta; discussed by Dr. B. McH. Cline and Dr. Julian Buff, Atlanta.

The Children's Bureau of the United States Department of Labor has printed Publication No. 4, a revised edition of Prenatal Care, which may be obtained by sending ten cents to the Superintendent of Documents, Washington, D. C. The pamphlet was prepared under the supervision of the Consulting Obstetrical Committee of the Children's Bureau.

The United States Public Health Service in a recent report describes 125 cases of a new lung disease apparently due to fungus which was found by x-ray examinations of 18,000 individuals. The condition was found while investigating the effects of dust upon miners. The disease is, for the time being, designated miliary lung disease due to unknown cause. A majority of the cases did not have sufficient symptoms to cause them to stop work or seek medical aid. The most characteristic finding was a large number of discrete, dense, shot-like spots scattered over the lung areas. Tubercle Bacilli were present in only two of the eighty-eight cases in which an examination was made of the sputum. Unstained smears of sputum of thirty-one cases (all those examined) were positive for fungus.

The staff meeting of the Crawford W. Long Memorial Hospital and Clinic, Atlanta, was held in the dining room of the hospital on April 9th. Dr. Frank K. Boland, Atlanta, read a paper entitled "Injuries of the Lungs and Pleura"; Dr. Lynn Fort, Atlanta, "A Few Observations with Intravenous Cholecystography."

The annual post-graduate summer clinics conducted by the Cook County Hospital, Chicago, under the auspices of the Chicago Medical Society will be held June 22nd to July 3rd.

The Atlanta Neurological Society held its annual meeting on March 27th. Officers elected were as follows: Dr. H. M. Bowcock, President; Dr. Albert F. Brawner, Vice-President, and Dr. Richard B. Wilson, Secretary-Treasurer.

The Second District Medical Society met in the City Hall at Bainbridge on April 10th. The scientific program consisted of the following titles for papers: "Hypertrophic Stenosis of the Pylorus," Dr. J. C. Brim, Albany; "The Surgical Gallbladder," Dr. T. C. Davison, Atlanta; "Treatment of Hypertension," Dr. Jas. E. Paullin, Atlanta; "Therapeutic Use of Glucose," Dr. S. E. Sanchez, Barwick; "Eye Injuries," Dr. Jno. T. King, Thomasville; "Impressions of the White House Conference on Child Health and Protection," Dr. M. A. Erhlich, Bainbridge.

Lexington, Kentucky, has been selected as the site for the first United States Narcotic Farm which will be erected and maintained by the government, which was authorized under additional legislation seeking to coordinate and crystalize the functions of the Narcotic Division, now designated by law as the Division of Mental Hygiene.

Dr. Chas. E. Waits, Atlanta, has been elected to membership in the American Association for the Study of Goiter. It is quite a distinction and honor to be elected to membership in an association in which membership is so limited.

Dr. W. W. Hardman, formerly of Elberton and more recently on the staff of the Veterans' Hospital at Jefferson Barracks, Missouri, has been transferred to the staff of the Veterans' Hospital, Lexington, Kentucky.

Dr. Wm. A. Smith, Atlanta, read a paper entitled "Management of Epilepsy" before the regular meeting of the Atlanta Neurological Society on April 24th.

The staff meeting of the Atlanta Tuberculosis Association was held at the offices, 282 Forrest Avenue, N. E., Atlanta, on April 23rd. Dr. S. H. Shippey, Atlanta, read a paper entitled "Minimal Tuberculosis"; Dr. Chas. H. Daniel, Atlanta, "Diagnosis of Pulmonary Tuberculosis"; Drs. Ben H. Clifton and C. C. Aven, Atlanta, "Some Interesting Surgical Chest Cases."

Dr. Cleveland Thompson, Millen, entertained the members of the Jenkins County Medical Society at a shad supper on April 9th at the Millen Hospital.

The United States Department of Agriculture has printed a Miscellaneous Publication, No. 113, entitled "Adequate Diets for Families With Limited Incomes". The pamphlet lists low-cost diets for general use, family food guide, equivalent weights and measures of selected food materials and the food contents of fish, fruits, meats, milk, and vegetables. The publication is for sale by the Superintendent of Documents, Washington, D. C. Price 5 cents.

The Clayton-Fayette Counties Medical Society met at Jonesboro on April 15th. Dr. J. L. Campbell, Atlanta, read a paper entitled "Appendicitis and Its Treatment".

Dr. L. G. Neal, formerly of Cleveland, has moved to Gainesville.

Dr. Seals L. Whitely, Cedartown, has been elected City Health Officer of Cedartown.

The Randolph County Medical Society held its monthly meeting in the Woman's Clubroom at Cuthbert on May 7th. Dr. Loren Gary, Georgetown, and Dr. E. C. McCurdy, Shellman, gave case reports; Dr. G. Y. Moore, President of the Association, was the principal speaker.

The Emanuel County Medical Society met at Swainsboro on April 30th. Dr. W. H. Lucas, Stillmore, gave clinical reports; Dr. R. C. Franklin,

Swainsboro, read a paper entitled "Syphilis of the Stomach".

Dr. Allen H. Bunce, Atlanta, Secretary-Treasurer of the Association, was elected President of the Emory University Alumni Association by the Alumni Council on May 1st. He is a member of the medical class of 1911. Mr. Percy McGehee, Atlanta, member of the liberal arts class of 1915, was elected First Vice-President; Mr. Clarence L. Smith, Valdosta, class of 1895, Second Vice-President; Mr. W. Hammond Johnson, Gainesville, class of 1907, Third Vice-President; Dr. J. M. Poer, West Point, medical class of 1907, Treasurer.

The United States Public Health Service has been conducting a campaign since 1912 in various sections of the United States, directed towards the eradication of trachoma. Trachoma among the white population of the United States is not confined to any sharply defined area, but is generally prevalent in the states of West Virginia, Kentucky, Eastern Tennessee, Western Virginia, Missouri, Arkansas, and Oklahoma. The first statement by the Public Health Service to people with trachoma is to place themselves under treatment by a reputable physician and not to be discouraged if the physician fails to relieve them within a few weeks. The importance of hygiene is stressed and patients warned against the wearing of dark glasses continuously.

The Terrell County Medical Society met at Dawson on April 28th. Dr. J. G. Dean, Dawson, read a paper on the "Treatment of Tuberculosis". Dr. S. P. Kenyon, Dr. J. H. Lewis, and Dr. J. G. Dean, all of Dawson, were appointed as a committee to confer with the county commissioners of Terrell county to urge the adoption of the "Ellis Health Law". Dr. G. Y. Moore and Dr. J. C. Patterson, both of Cuthbert, attended the meeting.

OBITUARY

Dr. Clarence Eugene Suggs, Barnesville; member; Atlanta School of Medicine, Atlanta, 1912; aged 47; died at a private hospital in Atlanta on April 15, 1931. He was a well known pediatrician and enjoyed an extensive practice. Dr. Suggs was held in high esteem by the people of Lamar county both as a man of sterling ability and a physician. He was a member of the Lamar County Medical Society and the American Medical Association. Surviving him are his widow, two sons, Clarence Jr. and George Suggs; one daughter, Miss Mary Suggs. Funeral services were conducted from the First Methodist church at Barnesville by Rev. John P. Erwin. Interment was in West View cemetery, Atlanta.

Dr. Thomas B. Bonner, Lavonia; Georgia College Eclectic Medicine and Surgery, 1894; aged 65; died at his home on April 10, 1931. He was a prominent member of the Masonic and Odd Fellows lodges and had practiced medicine in Franklin and Hart counties

for forty years. Dr. Bonner represented his district in the state senate one term and was at one time mayor of Lavonia.

Dr. William Virgil Nash, Atlanta; Georgia College Eclectic Medicine and Surgery, Atlanta, 1914; aged 41; died at his home at 421 Clifton Road, N. E., on March 30, 1931. He was associated with Dr. G. H. Noble, Jr., in the practice of medicine at the time of his death. Surviving him are his widow, three daughters, Misses Dorothy, Hazel and Rebecca Nash. Funeral services were conducted from the parlors of Barclay & Brandon by Rev. E. T. Davis. Interment was in the churchyard cemetery at Camp Creek.

Dr. William Henry Harison, Augusta; member; Columbia University College of Physicians and Surgeons, New York City, 1879; aged 78, died after an extended illness at his residence, 1006 Milledge Road, April 27, 1931. He was born in Augusta and attended a literary school at Concord, New Hampshire. After graduating in medicine and serving as an interne at Bellevue Hospital, New York, he returned to Augusta and began the practice of medicine. Dr. Harison afterwards visited some of the medical schools and clinics of Germany, where he took post-graduate work. He was a member of the Church of Atonement. The church was founded by his mother, in which his father preached for seventeen years without remuneration. Surviving him are his widow, one daughter, Mrs. Mary Harison Phinzy, Augusta; one son, William H. Harison, Augusta. Funeral services were conducted from the residence. Interment was in Summerville cemetery.

Dr. Columbus H. Turner, Conyers; New York University Medical College, New York City, 1870; died at the home of his nephew, 54 Standish Avenue, N.W., Atlanta, April 29, 1931. He practiced medicine in Conyers and surrounding community for forty-seven years. Dr. Turner was a prominent physician and had many friends. He was a member of the Conyers Methodist Church. Surviving him are one brother, L. H. Turner, Elberton; one sister, Mrs. A. C. McCalla, Conyers. Funeral services were conducted from the Conyers Methodist Church. Interment was in the old Conyers cemetery.

MESENTERIC INVOLVEMENT IN BUERGER'S DISEASE (THROMBO-ANGIITIS OBLITERANS)

Norman Taube, New York (*Journal A. M. A.*, May 2, 1931), discusses the history, etiology and pathology of thrombo-angiitis obliterans. Special stress is laid on the distribution of the lesions other than of the extremities. Twenty-six cases from the literature of lesions affecting other blood vessels besides those of the extremities are tabulated. Two cases observed personally are added to the list. One patient had intestinal symptoms of mesenteric involvement which cleared up for a while, but later the patient succumbed to mesenteric thrombosis.

INFORMATION

To our Members:

The Journal of the Medical Association of Georgia and the Cooperative Medical Advertising Bureau of Chicago maintain a service department to answer inquiries from you in reference to pharmaceuticals, surgical instruments and other manufactured products or anything you may need in your home, office, sanitarium, or hospital.

It is absolutely free and we invite you to use this service.

Perhaps you may want a certain kind of drug or instrument which is not advertised in the Journal and may not know just where to secure it most conveniently, or other things in connection with your home and practice. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in this Journal; but if they are not, we urge you to ask the Journal about them, or write direct to the Cooperative Medical Advertising Bureau, 535 North Dearborn Street, Chicago, Ill.

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The United States Civil Service Commission announces the following open competitive examinations:

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(General Medicine and Surgery)

Applications for the positions of medical officer, associate medical officer, and assistant medical officer in general medicine and surgery will be rated as received by the U. S. Civil Service Commission, at Washington, D. C., until June 30, 1931.

The examinations are to fill vacancies in the Departmental Service, Washington, D. C., Veterans' Administration, Public Health Service, Indian Service, Coast and Geodetic Survey, and Panama Canal Service.

Competitors will not be required to report for examination at any place, but will be rated on their education, training, and experience.

Applications must have been graduated from a medical school of recognized standing not more than twenty years prior to the date of making oath to the application. For the positions of medical officer and associate medical officer, certain specified hospital service and experience is required; for the position of assistant medical officer, at least one year of practice or internship is required.

Full information may be obtained from the Secretary of the United States Civil Service Board of Examiners, at the post office or customhouse in any city, or from the United States Civil Service Commission, Washington, D. C.

PHYSICIAN QUALIFIED IN TUBERCULOSIS
NEEDED AT REGIONAL OFFICE OF
VETERANS' ADMINISTRATION,

DALLAS, TEXAS

Washington, D. C.—The United States Civil Service Commission has announced that a vacancy exists in the position of physician qualified in tuberculosis in Regional Office of the United States Veterans' Administration at Dallas, Texas.

A man is desired for the appointment. The entrance salary is \$3,800 a year. Higher-salaried positions are filled through promotion.

Full information may be obtained from the Secretary, Board of United States Civil Service Examiners, post office or customhouse, any city, or from the United States Civil Service Commission, Washington, D. C.

NEW LIGHT ON RICKETS

In the Journal of the American Medical Association, April 4, 1931, page 100, appears an imposing list of scientific papers on vitamin D, the basis for which is Mead's Viosterol in Oil, 250 D.

It is highly significant that almost all of the authorities in this field have accepted the Mead brand as the standard. This is due to the medical profession's unique respect for Mead Johnson & Co., and the fact that this particular brand of viosterol enjoys the longest continuous laboratory and clinical experience in America—dating back to 1927.

On page 12 of the *J. A. M. A.* for April 11, 1931, under the title "Viosterol is not a substitute for cod liver oil except in rickets", is a very interesting statement of the comparative values of viosterol, cod liver oil, and 10 D cod liver oil, which clarifies the respective advantages of each of these antiricketic agents.

MOVED TO DOCTORS BUILDING

The following doctors announce the removal of their offices to the new Doctors Building, 478 Peachtree Street, N.E., Atlanta:

William Willis Anderson	T. C. Davison
W. Edgar Barber	Geo. F. Eubanks
J. R. Barfield	J. Clarence Johnson
T. L. Byrd	Trimble Johnson
John D. Blackburn	J. A. McGarity
Julian H. Buff	Cosby Swanson
Hal M. Davison	Joseph Yampolsky

Dr. J. K. McClintic, formerly of Monroe and Secretary-Treasurer of the Walton County Medical Society for a number of years, has accepted a position on the staff of the United States Veterans' Hospital located at Prescott, Arizona. He presented his surgical instruments to the Walton County Hospital before his departure.

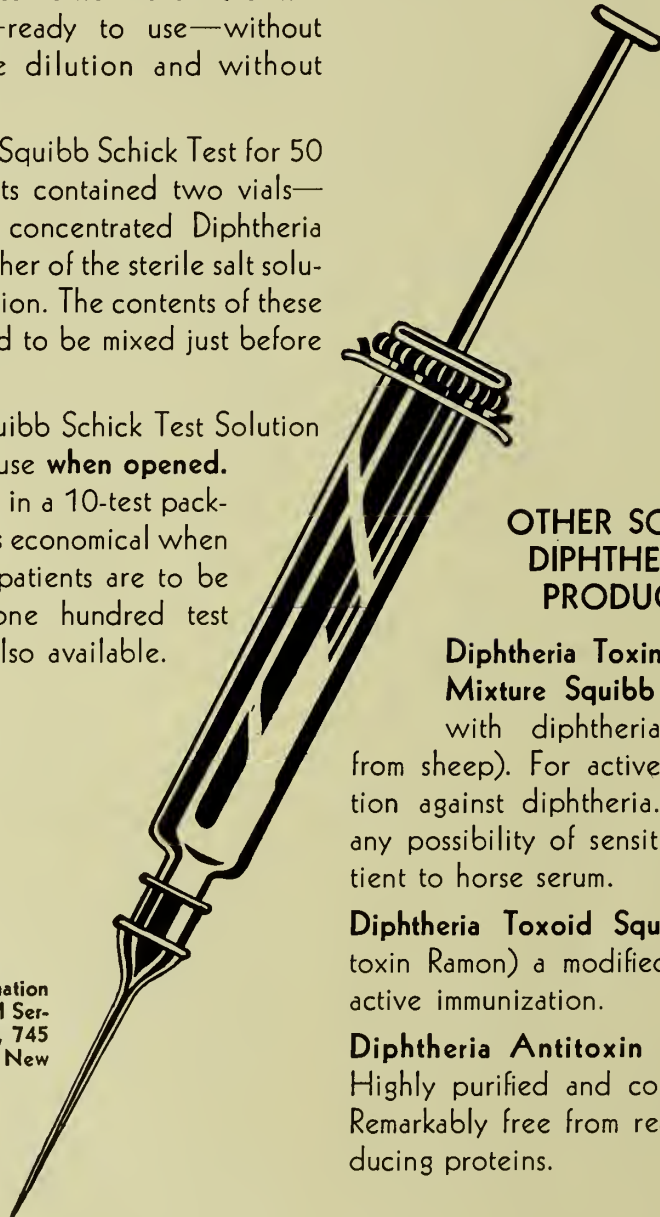
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STUDIES OF CALCIUM AND PHOSPHORUS
METABOLISM

Walter Bauer, William T. Salter, and Joseph C. Aub, Boston (*Journal A. M. A.*, April 11, 1931), have found that the very slow, intravenous administration of 20 cc. of a sterile solution of 5 per cent calcium chloride promptly relieves the severe pain of colic caused by lead, or ureteral or biliary stone. The relief afforded by such therapy is more rapid and more constant than that by other forms of treatment they have employed.

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THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

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June, 1931

Number 6

PRESENTATION OF THE "BADGE OF SERVICE" TO THE RETIRING PRESIDENT*

J. C. PATTERSON, M. D.
Cuthbert

Mr. Chairman, Members of the Medical Association of Georgia, Ladies and Gentlemen:

It is the custom of the Medical Association of Georgia, at each annual session, to present the retiring president with a "Badge of Service". Nothing could give me more pleasure than to be assigned this task, particularly on the occasion when the recipient is an intimate friend and neighbor.

People of all nations are learning a new meaning of service. Indeed, every man is beginning to know that his life is given to the world for something more than material gain. That contact with his fellow man is for other purposes than obtaining from him that which gives sustenance to the physical body. This doctrine is not a new one to the physician. Since the days of the founder of our great profession, each century has written a new page in life's history because the accomplishment of some physician was of definite and outstanding service to mankind.

Our profession has gone forward in its endeavor to relieve human suffering and cure the ills of man, not neglecting in the meantime the attributes of fine citizenship and human contact. The finest of romance and drama have been written around the lives of physicians. The outstanding characters of statecraft and diplomacy have come from our profession. Oliver Wendall Holmes served his generation as a physician, and entertained them with his fine philosophy in *The Autocrat of the Breakfast Table*. Dr. Leonard

Wood, a graduate of our Technological University, became an outstanding diplomat, and laid the foundation for a government through which the Philippines became a free people, and died with the highest rank as a soldier that the army service was able to give him. Dr. Wm. C. Gorgas, through his efforts of sanitation on the Isthmus of Panama and the control of yellow fever, made possible the great engineering feat of connecting the Atlantic with the Pacific, and made a distinct contribution to the navigation of the world.

Think of the happiness that has come to the human family as a result of the service rendered by Lister, Pasteur, Ephriam McDowell, and Crawford W. Long. Robert Louis Stevenson did his masterpiece in his *Eulogy of the Doctor*. McLaren portrayed the beautiful life and service of Dr. William McClure in his delightful book *Beside the Bonny Briar Bush*. The statues of physicians in the Hall of Fame in Washington shed a beautiful radiance in this most sacred chamber.

The life of the physician and the true meaning of service is synonymous. How fitting it is then that we should have something symbolic of the service rendered by our retiring president to our organization during his term of office. For many years he has been secretary of his county society and was elected secretary for life. He has been councilor for his district, the President of this Association. We can indeed look beyond the service he has rendered the Association to find the merit he has to this "Badge of Service". Since the early period of his career, he has been serving his community as citizen, neighbor, friend, and physician. As a citizen, he has contributed largely toward the development of his community. As neighbor, he is generous and kind. As a friend, he is sympathetic and puts into prac-

*Address before a public meeting of the Medical Association of Georgia, Atlanta, Ga., May 13, 1931.

tice the brotherhood of man. As physician, he has "notably exhibited the virtues" of his profession. He has brought happiness into the homes of those who were sad, he has brought smiles to the faces of those who were downcast. "Generosity he has, such as is possible only to those who practice an art, and never to those who drive a trade; discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments". By his fine ability, he has restored in more instances than he may know, the last spark of life which was slowly ebbing. His fine ethics of practice have been the golden rule and a fine example for the younger men of his noble profession.

It gives me a great deal of pleasure to present the "Badge of Service" of the Medical Association of Georgia to the retiring President, Dr. G. Y. Moore, whose life has been a benediction to me and all those with whom he came in contact.

HOSPITAL TRAINING OF INTERNS

HAROLD L. FOSS, Danville, Pa. (*Journal A. M. A.*, March 28, 1931), maintains that irrespective of how well organized the intern service may be and of how great the effort put forth by the heads of departments to render the training of the most practical value, the greatest accomplishment will not be achieved without a certain basic principle being borne to mind. The young physician, fresh from the medical school, and entering his intern service, begins now to practice more of the science than of the art of medicine. He is in the most formative period of his existence, keen to learn, wide-eyed and enthusiastic, trusting and hopeful, relying tremendously on the guidance of his chiefs, so much so that it places a great responsibility on them the significance of which none too frequently bear in mind. The student acquires a sense for scientific work only in his student days, and the degree of scientific training and interest imparted to the young man in the medical school (*and hospital*) determines his intellectual level for the rest of his life. Clinicians should fully appreciate their obligations as teachers, realizing that their role is hardly second in importance to that of the men who have guided the student during his college years and that it is their privilege by their precept and example, by their opportunity to stimulate his latent enthusiasm, by the inspiration of their own personalities to afford him in the most important phase of his professional career that guidance so important in molding and shaping and directing his destinies to the end that his life becomes a failure or a success largely as the clinicians choose to make it.

ACCEPTANCE OF THE "BADGE OF SERVICE"*

G. Y. MOORE, M. D.
Cuthbert

A combination of circumstances has conspired to make your retiring President the center of attraction for a brief period at least. I have fancied myself a strong man down through the years, equal to almost any emergency, but having listened to the gracious words just spoken enumerating in detail some of the things I have achieved, and now that you propose to add yet another honor I am overwhelmed with the thought that I should have striven more nobly to serve those who reposed their confidence in me.

I am a sort of amateur confessor and at this moment scarcely know what to say, yet I am hopelessly old-fashioned in some things. Along the pathway which I have traveled I have never been insensible to these fine and beautiful qualities which I have observed in so many of my fellow-travelers. And now I confess that almost anything might have been expected from you—you who have co-operated with me in the arduous task of leadership, who have surpressed all painful criticism, and have generously commended me for whatever I have done for the advancement of our profession in Georgia.

I confess that this is a delightfully agreeable moment, a moment I shall often recall with pleasure. Speech is inadequate to describe one's emotions on such an occasion as this. It is like talking the art of war to Pershing, or describing an oratorio to Mozart, or teaching Caruso how to sing. It is a matter of feeling. Words can give only a beggarly description of the affection I have for each member of the Medical Association of Georgia. Your every act in response to my appeals have always surpassed my expectations for which I am profoundly grateful.

And now as the mellow light falls at the close of my official day as President it is good to know that you desire to present

*Address before a public meeting of the Medical Association of Georgia, Atlanta, Ga., May 13, 1931.

me with the "Badge of Service" of the Medical Association of Georgia. This act I assure you is keenly appreciated. I accept it as a priceless heritage from those I love.

ANGINA PECTORIS*

CHARLES C. HINTON, M.D.
Macon

It is rather a pleasant characteristic of our profession that if light breaks on our minds we have a natural desire to pass it on. It is also quite human that we presume a need of that light by others to the extent that we have failed to see the truth ourselves. My purpose in this paper is not to try to say the last word on the subject of angina pectoris but rather to arouse your interest, that you may not fail to recognize the syndrome and may realize that it is neither rare nor hopeless.

Heberden's original description, in 1768, is such that he justly deserves the tribute of having it quoted time and again in articles on the subject. He says, "But there is a disorder of the breast marked with strong and peculiar symptoms, considerable for the kind of danger belonging to it, and not extremely rare, which deserves to be mentioned more at length. The seat of it and the sense of strangling and anxiety with which it is attended may make it not improperly be called angina pectoris. The pulse is, at least sometimes, not disturbed by this pain, as I have had opportunity to observe by feeling the pulse during the paroxysm. Males are most liable to this disease, especially such as have passed their fiftieth year. I have seen nearly a hundred people under this disorder, of which there have been three women. . . . The pain may be brought on not only by exertion, excitement or meals but also by swallowing, coughing, going to stool or speaking. . . . The angina pectoris, as far as I have been able to investigate, belongs to the class of spasmodic, not of inflammatory complaints. For, in the first place, the access and recess of the fit is sudden. Secondly, there are long periods of perfect health. Thirdly, wine and spirituous liquors and

opium afford considerable relief. Fourthly, it is increased by disturbance of the mind. Fifthly, it continues many years without any other injury to the health. . . . Lastly, its attacks are often after the first sleep, which is a circumstance common to many spasmodic disorders."

Heberden mentions also that attacks are brought on most often by exertion, especially in walking up even a slight incline or against a wind and that the patient is more subject to the attacks soon after eating. He emphasizes the commanding impulse to halt instantly and remarks on the rapidity of relief from the cessation of effort. As remarkable as his description is it is not surprising that only a few physicians today feel that he included more than one disease condition in his clinical group. To these men angina pectoris is and must be one disease. To others it is a symptom complex which can be initiated by any one of a number of pathological conditions. Still others seek to analyze the various apparent factors and learn what they have in common that can be responsible for the picture. The most prominent etiological theories are grouped about aortic disease, coronary disease and myocardial exhaustion. However, it is well known that many individuals have one or more of these conditions and never suffer from angina pectoris. Also patients live and die with angina pectoris and autopsy fails to show any of the above triad.

Current literature abounds in the expressed opinions of various authors on the importance of many factors. Robertson and Brown both say that suprasigmoid or coronary spasm can cause the attacks, but not cardiac distention. Bischoff considers the angina of effort to be due to intermittent myocardial ischaemia with coronary disease as the most prominent pathological lesion. Caeta thinks there is always a coronary lesion, however small it may be. Wenckebach feels that overaction of the heart causes coronary distention, not spasm, and the pain prevents reflex peripheral dilatation. The nitrites give relief by producing this dilatation, and sympathectomy is successful to the extent that it prevents the pain reflex. Pal claims the pneumatosis with cardiospasm may produce the typical pain and even reflex cardiac death. Bridges reports finding blood uric acid above

*Read before the Medical Association of Georgia, Augusta, Ga., May 16, 1930.

normal and claims cures from diet and salicylates.

Dmetrenko says we must look for less syphilis and more emotions; in other words, less organic and more functional pathology. Levine and Walker found latent hyperthyroidism in eleven cases, the patients being cured by treatment of this condition. Lev and Hamburger also feel that hyperthyroidism frequently plays a part by producing more cardiac activity than the coronaries will permit. This does not necessarily presume diseased coronaries. Katz reports a patient who had an anginal attack after each injection of insulin while Giroux and Kisthianos have used insulin in some non-diabetics and have prevented attacks for several months. They attribute the success to a non-glycolytic fraction of pancreas extract which is hypotensive in action. Vaquez names this substance angioxyl and reports quite good results in the treatment of angina with extract of pancreas freed from insulin.

Moschowitz describes the angina of tobacco users and says the pain is more intense and prolonged and more likely to occur in sleep than the usual type and insists that months of abstinence are required before tobacco can be eliminated as the causative factor. On the other hand Johnson offers statistical proof that tobacco can not be considered a major factor in the production of angina and that it does not cause hypertension. Labbe demonstrated the possibility of coronary spasm by producing it with ergotamine tartrate. In his experiment auricular flutter also followed the spasm. Shaw showed that arterial lesions are produced when the nerve supply of an area is involved in scar tissue and he believes that angina is due to a lesion in the lower cervical and upper dorsal cord. Pletnev thinks the attacks are produced by stimulation of a certain innervation area, probably the stellate ganglion. Kahn and Barsky's series shows 22 per cent beginning under 40 years of age and points to arteriosclerosis, diabetes and rheumatism as strong predisposing factors. Wassermann thinks angina pectoris is a reflex syndrome. The segment of the cord representing the heart and aorta is supposed to possess increased tonicity. This and the vagus tonicity are increased in

the attack and are controllable by pressure on the vagus and carotid.

McCrae considers the condition a syndrome producible by lesions of the aorta, the coronaries, the myocardium or reflexly from focal disease elsewhere. O. S. Allen insists on differentiating angina pectoris from chronic coronary disease in which, he says, the pain is much less intense, lasts longer, is accompanied by diastolic hypertension and the patient usually has albumin and casts in the urine and some degree of cardiac enlargement. Alexander Lambert considers true angina as aortic in origin and differentiates it from chronic coronary disease in which radiation is more often epigastric; dyspnea is usually present in an attack; collapse with rapid thready pulse is frequent; arrhythmia not uncommon; rales in the lung bases usual; pain longer and more likely to require morphine and less likely to yield to nitrites; less likely to result from exertion; more likely to occur in sleep; more likely to be accompanied by restless apprehension than statue-like fixation.

Kieffer and Resnik offer a forceful thesis in support of an attempt to correlate other theories and explain all cases on the basis of anoxemia of the myocardium. Briefly their argument is as follows: Practically all cases have coronary disease or aortic insufficiency with low diastolic pressure or some such condition as anaemia, arteriovenous fistula, etc. The rarity of angina in rheumatic aortic insufficiency is accounted for by the usual co-existence of aortic stenosis and the absence of such low diastolic pressure. Opposing the pure coronary theory they submit cases with marked coronary occlusion without anginal attacks. These must be accounted for by a relative insensibility to pain or by slow development of the lesion with complete compensation by free anastomosis and an abundance of Thebesian vessels. Then there are the cases of angina with no demonstrable coronary lesion. The usual explanation of these is hypothetical coronary spasm but these authors raise the question why is coronary spasm so rare except in the presence of coronary disease or luetic aortitis and also how can a very sclerotic coronary contract.

Miller, Smith and Graber say that there

is no vasomotor action of the coronaries and that such action is produced entirely by speeding up or slowing up of the heart. Anrep and Segall claim that stimulation of the sympathetic dilates the coronaries while the vagus action is to constrict them. The argument loses much of its importance in the present theme, however, as the pulse is not slowed in anginal attacks. Danielopolu revises the coronary theory to a relative insufficiency of coronary circulation to the work momentarily demanded but is forced to hold to the theory of coronary spasm to account for some cases. Arguing against the pure aortic distention theory Kieffer and Resnik point out the frequency of angina without aortic disease, the frequency of aortic disease without angina, and the difficulty of explaining sudden death except as cardiac standstill reflexly produced through the vagus by pain. Neither bradycardia nor partial or complete block is present in severe non-fatal cases to suggest such vague overaction. The argument that the fatal outcome of vagus stimulation is due to the condition of the myocardium is countered by cases of extensive mitral and aortic disease without sudden death and the occurrence of sudden death where the myocardium is sound.

It is further stated that vagus stimulation does not affect the refractory period of the ventricles and that the instantaneous death is in all probability due to ventricular fibrillation. In criticizing the theory of myocardial exhaustion they simply call attention to the facts that most cases of myocardial exhaustion do not suffer from angina and that most cases of angina have relatively good heart muscles. In discussing their anoxemia theory they emphasize the similarity of anginal attacks to intermittent claudication. In this condition pain develops on use of the muscle that is relatively deprived of its oxygen supply and occurs before exhaustion. Practically all cases of angina pectoris have conditions which would favor relative anoxemia of the heart muscle on exertion (narrowed coronaries, low diastolic pressure, anaemia, etc.) A relative insensibility to pain is offered as the explanation of its absence in conditions where it would have been expected. They consider status anginosus as acute coronary occlusion. Pursuing their thought they pre-

sent evidence that angina ends in sudden death in a large percentage of cases; that sudden cardiac death occurs most frequently in just those conditions usually associated with angina; that sudden cardiac death experimentally is nearly always due to ventricular fibrillation and is especially frequent in conditions producing anoxemia; that clinical cases of coronary occlusion frequently show ventricular tachycardia, a forerunner of fibrillation.

It is evident from the foregoing resume of opinions that a diagnosis of angina pectoris will vary in its significance according to the view of the physician. Kilgore continues to use the term "pseudo-angina," although condemned by most writers, justifying its use by the statement that it only acknowledges an ignorance of what really exists. He includes under this head most of the precordial, lancinating pains and some of the dull substernal pains. Typical radiation to the left shoulder and inner brachial area help to distinguish them but atypical radiation does not rule out angina. It must be remembered that the pain may vary from a slight substernal tightness to a most intense cramping, crushing, bone-breaking ache behind the sternum with radiation to the left shoulder, the inner surface of the left arm, down the forearm, especially on the ulnar side, even to the finger tips. A similar radiation may occur on the right or it may extend up into both sides of the neck and into the lower jaws and, in aortic cases, up back of the ears to the crown of the head.

The duration may be very brief or it may last several hours. The attack may be so mild that it is unnoticed by a companion or it may be accompanied by rigid immobility, anxious expression, ashy pallor and profuse perspiration. Belching is not at all uncommon and may be so prominent that both patient and doctor are misled into the belief that indigestion is the whole trouble. Under whatever variety of the above symptoms the attacks occur there are several points worth bearing in mind.

An unsolicited history of a constricting, substernal pain that appears as a result of exertion and is relieved quite rapidly by rest is too suggestive to be ignored. If you make

the additional test of having the patient dissolve 1/100 gr. of nitroglycerine under his tongue when a pain appears and relief is almost magic your diagnosis is practically assured. This will not occur with brachial plexus neuralgia or with root pains of spinal osteoarthritis. Conversely this latter condition, although it may have the same distribution, is more frequently found also in the back, is improved by exercise, is relieved by coal-tar analgesics, and is posturally produced and mechanically relieved. The pain of gall-bladder disease, peptic ulcer and cardiospasm is not relieved by nitrites. A further test that is not without danger and should be reserved for quite doubtful cases is the injection hypodermically of 1 c.c. of 1:1000 adrenalin solution. This will usually precipitate an attack of angina but will have no effect on any of the other conditions mentioned.

The opportunity of the electrocardiogram to be of aid in the diagnosis depends on the existence of and the location of myocardial dysfunction. Most observers state that there is not any typical electrocardiographic picture. However, Feil and Siegle had opportunity to examine four patients during attacks and in intervals between attacks. One showed no change. Three showed inversion of the S-T complex in one or more leads during the attack with a return to normal afterward. Vela also writes of inverted T-waves in some cases. These remarks, of course, do not refer to the changes that occur with coronary occlusion.

Prognosis in angina pectoris is necessarily precarious. In a disease in which death may be very sudden in the first or second attack caution must be our motto in expressing an opinion of its probable duration. Osler says the outlook "depends on the patient himself—the life he has led—the life he is willing to lead." Hamman says, "When angina comes on in the middle of a busy, active life and the symptoms subside or greatly improve following rest or the curbing of pernicious habits, then the prognosis is good, within the limits set by the nature of the disease; on the other hand when angina comes on with but slight provocation and persists, unabated by judicious care, then the prognosis is ominous." McKenzie thought the age of onset and the presence of hypertension had very little effect

on the prognosis but were both on the bad side of the ledger. He considered of bad import, pulsus alternans, nocturnal orthopnea, marked Cheyne-Stokes respiration and persistence of easy production of attacks. He advised that no prognosis be volunteered for the first six months.

Kahn and Barsky add to these bad signs cardiac asthma, systolic gallop, cyanosis on exertion or with an attack. They are very definitely of the opinion that the more advanced the age at the onset the worse the outlook. Some writers consider the occurrence of nocturnal attacks of bad prognostic import. The intensity of the pain means very little. The frequency of attacks is not important in its arithmetical ratio. Several of my patients have had mild attacks and have died in the second or third attack. One had from three to thirty attacks daily while at rest in bed for three months before a coronary thrombosis ended her suffering. Another had as many as two dozen a day while in bed and has been back at work for eighteen months, having as few as two to six daily. Personally I consider of bad prognosis, evident myocardial damage; organic disease frequently associated with angina such as syphilitic aortitis, arteriosclerosis, etc.; advance age at time of onset; an unwillingness or inability to restrict one's activities; failure to show marked improvement under proper treatment.

As to what constitutes proper treatment there is some variance of opinion. Of course syphilitics should be treated for syphilis. All patients should be guarded as far as practicable from physical exertion, mental strain and emotional stress. With the use of hypotensive pancreatic extract I have had no experience but it seems to offer some hope. The use of tobacco may well be interdicted for several months or long enough to see if it had any causative effect. Katz reports the cure of reflex cases associated with intestinal fermentation by the use of activated charcoal. Babcock relieved six out of twenty cases with benzyl benzoate, presumably by its antispasmodic action on smooth muscle.

Gilbert and Kerr have made a careful study of the purine-base diuretics and their ability to prevent attacks and concluded that they ranked as follows: theobromine, theophylline

and caffeine. Only the first two are used. Theobromine is given in five grain doses three times a day and euphyllin one and one-half to three grain doses at the same intervals. Both may be given continuously without losing much of their effect but frequently they are given three days a week only to avoid gastric disturbance. Both of these have been demonstrated to increase the coronary flow by 40 per cent or more. Sir Lauder Brunton first suggested the vasodilator nitrites for relief of the attacks. Amyl nitrite is more dramatic and slightly more rapid in action but is not as practicable when a patient has ten to thirty attacks daily as the more easily used nitroglycerine. In my experience the tablet triturates seem to hold their strength and act more effectively than the hypodermic tablets and they may well supersede the latter as it is rarely if ever necessary to give it by needle. More rapid action is attained by crushing the tablet and letting it dissolve under the tongue than by hypodermic administration. Sodium nitrite and erythrol tetranitrate may be used for prolonging the hypotension but not for the relief of pain except in the absence of anything better. A few authors recommend alcohol for its vasodilator effect. My experience with it has been slight and inconclusive.

Leaving now the strictly medical treatment we find Freund claiming that ultraviolet radiation benefits all cases, regardless of etiology. Nemours-August and Barriere used roentgen irradiation of the involved innervation and reported thirty-one patients out of a series of fifty-one cured and others benefited. These cases had resisted all medical treatment. Lian and Barrien recommend low voltage irradiation, increasing from 5 to 25 minutes in five weeks, in all patients under 70 who have not myocardial insufficiency. I have had only one patient treated by x-ray over the cervical sympathetic and he showed no observable improvement in three months, although he has subsequently improved.

Jonnesco was the first to sever the cervical sympathetic with the hope of relieving the pain. The surgical literature on the subject since that time has become quite extensive. Leriche and Fontaine believe the stellate ganglion is the point of irritation and the

logical thing to be removed but most surgeons feel that this structure should not be removed if the myocardium is questionable as the accelerator sympathetic effect is thereby lost. Duclos recommends cervical sympathectomy where the coronaries are not organically diseased. Vela reports four successful cervical sympathectomies with correction of the inverted T-waves. Pletnev injects the first, second and third left dorsal ganglia with one per cent procaine followed by 70 per cent alcohol with good results. J. C. White prefers the paravertebral alcohol injection to operation. Richardson and Paul White report and compare eight varied sympathectomies and eight alcohol injections and prefer the latter. Dandy also agrees with this decision. Hesse advises division of the depressor nerve to prevent facial neuralgia from the operation; thinks removal of the superior cervical ganglion the best operation; favors partial to total cervical sympathectomy; and says that literature reveals good results in 65 per cent; no results in 17 per cent and fatal results in 13 per cent. E. C. Cutler in a careful review of the subject concludes that section of the sensory paths frequently gives relief; section of the motor paths seems to add something; and that variety of results from a variety of procedures proves that much is not yet known. Scarcely a writer dares to hope that anything more is accomplished than relief of pain. However, very few seem fearful that removal of the warning pain will materially shorten life. Perhaps this is in part due to the fact that to a large extent those selected for operation have been chosen because they were already beyond any other hope of relief.

SUMMARY OF CASES

The following is a brief summary of my thirty-one cases: There were twenty-five men and six women in the series, the youngest patient being 32 and the oldest 75, the average age being 55 years. The shortest duration of the disease was twelve hours, the longest duration twelve years, while the average duration was twenty-two months. The character of the pain was mild in nine patients, severe in eleven and moderately severe in eleven. Attacks were frequent in six patients and rare in twenty-five. Arteriosclerosis was present in seventeen patients, syphilis in three, aortic insufficiency in six, myocardial weakness in ten, marked hypertension in two and slight hypertension in eight. Hypertension was present only during the attacks in six patients. The precipitating cause was exertion in twenty-three patients, ingestion of food in four, use

of tobacco in two, and emotional upset in three. Nocturnal attacks occurred in five patients. Nineteen patients in this series are dead.

Complications.—Six patients suffered acute coronary occlusion, five of whom died. One patient had a ruptured aneurysm, three had gallbladder disease, one was operated upon for prostatic obstruction, one had pellagra, one had myxedema and one had nephritis. Raynaud's disease in the fingers was observed in one patient. Nine of the fifteen patients with complications were treated with theobromine which seemed to reduce the frequency of attacks.

ANAEROBIC WOUND INFECTION

T. C. DAVISON, M.D.

Atlanta

There are numerous anaerobic bacteria but this paper will be confined, for practical purposes, to a brief discussion of wound infection by the *tetanus bacillus* and the *bacillus aerogenes capsulatus* (B. Welchii, B. Perfringens).

In discussing tetanus, I shall give only a resume of the most recent literature. Tetanus is distinctly an intoxication dependent upon the development of infection in a deep, dirty wound. The organisms must find favorable conditions for proliferation and lodgment. It has been shown that tetanus develops most frequently in connection with puncture or contusion wounds, and especially when the tissues suffer considerable injury and much foreign material has been introduced into the wound. The presence of a mixed infection also seems to encourage the proliferation of the tetanus bacilli. In the earlier months of the World War tetanus took a tremendous toll. The incidence in the wounded of the British forces was 1.6 per cent in September, 1914, and 3.2 per cent in October. This was no doubt due to the highly fertilized character of the soil upon which the battles were fought, the intimate contact of the soldiers and their clothing with the soil in trench life and the extensive use of high explosives. The high incidence of tetanus among the wounded of all the armies involved soon brought about the general use of antitoxin as a prophylaxis in all wounded cases, which practically eliminated tetanus by the time our troops reached the battle front three years later. In our army it was the custom to give antitetanic serum

to every case, however slight the wound, as early as possible. As a result we had very few cases of tetanus develop.

The former high incidence of tetanus following Fourth of July celebrations has been less common in recent years because of the general use of antitetanic serum. The specific bacillus multiplies locally, but does not spread throughout the body. The toxins are absorbed by the end organs of the motor nerves and travel to the ganglion cells of the central nervous system, not by way of the blood or lymph channels, but along the axis cylinders of the peripheral nerves. The symptoms are attributable mainly to a disturbance of the central nervous system. A certain amount of toxin circulates in the blood, but the only path to the central nervous system lies along the axis cylinders of the motor nerve tracts. A section of the spinal cord would prevent the toxin from reaching the brain.

The average incubation period is from five to twelve days; however, it may be from one to thirty days. The onset of this disease is variable. It may begin with restlessness, headache, irritability, darting pains in various parts of the body and a change of facial expression. Later unmistakable symptoms develop, stiffness of the jaws, difficulty in mastication and swallowing, tonic muscular spasm with the so-called "sardonic grin," the lips drawn tight and separated, showing the teeth, the eyebrows arched and the lids partially closed.

The muscular stiffness extends to the neck, abdomen and the extremities and opisthotonos develops. Later the muscles are thrown into tonic spasms by peripheral irritation. Clonic spasms develop, affecting the diaphragm and muscles of respiration, causing cyanosis, rapid breathing, and a facial expression of agony and pain. These paroxysms become very frequent. The patient may or may not have temperature.

The course is rapid and the patient dies of heart failure, asphyxia or exhaustion.

All cases of tetanus cannot be treated alike. Various authorities differ and each individual case must be treated upon its merits. A prophylactic dose of 1500 units of antitoxin should be given within the first twenty-four hours following all puncture wounds, se-

verely lacerated wounds and compound fractures, particularly when there is soil contamination. In compound fractures, especially when badly contaminated, a second prophylactic dose should be given on the eighth day, inasmuch as the first dose by that time will have been eliminated. If a second dose is given the danger of an anaphylactic reaction should be borne in mind.

Upchurch, in the Virginia Medical Monthly, August, 1928, advises the use of antitoxin following all injuries. Wainwright, in the Archives of Surgery, May, 1926, states that "a study of the reports does not seem to show that even the puncture nail wound of the foot is followed with sufficient frequency by tetanus to warrant routine prophylaxis, nor is it indicated routinely in the wounds in ordinary industries, but only in wounds received in stables, barnyards, on the Fourth of July, gunshot wounds and when there is soil contamination."

A total of 50,000 to 150,000 units should be given intravenously in the first twenty-four hours, divided into three to five doses. Thereafter 15,000 to 100,000 units intravenously in two or three doses daily until convalescent. Some authorities also give antitoxin intraspinally, intramuscularly, and by injecting it around the wound. Still others give it intracranially, by way of trephine openings in the parietal bones with the serum injected beneath the dura. While all agree that it should be given intravenously and in large doses, some claim that the intraspinal and intracranial treatments are harmful and increase the mortality rate. Statistics from various sources give the mortality rate from 32 to 60 per cent. In the few cases I have treated all three routes were used. Antitoxin was injected into the muscles above the wound, hoping to prevent a continued absorption of the toxins from this area, the intraspinal dose was given to neutralize the toxin already absorbed by the central nervous system, and then large doses were administered intravenously.

The local treatment of the wound in a case of tetanus consists in making all parts accessible to the air by the removal of all devitalized tissue, and any foreign material if

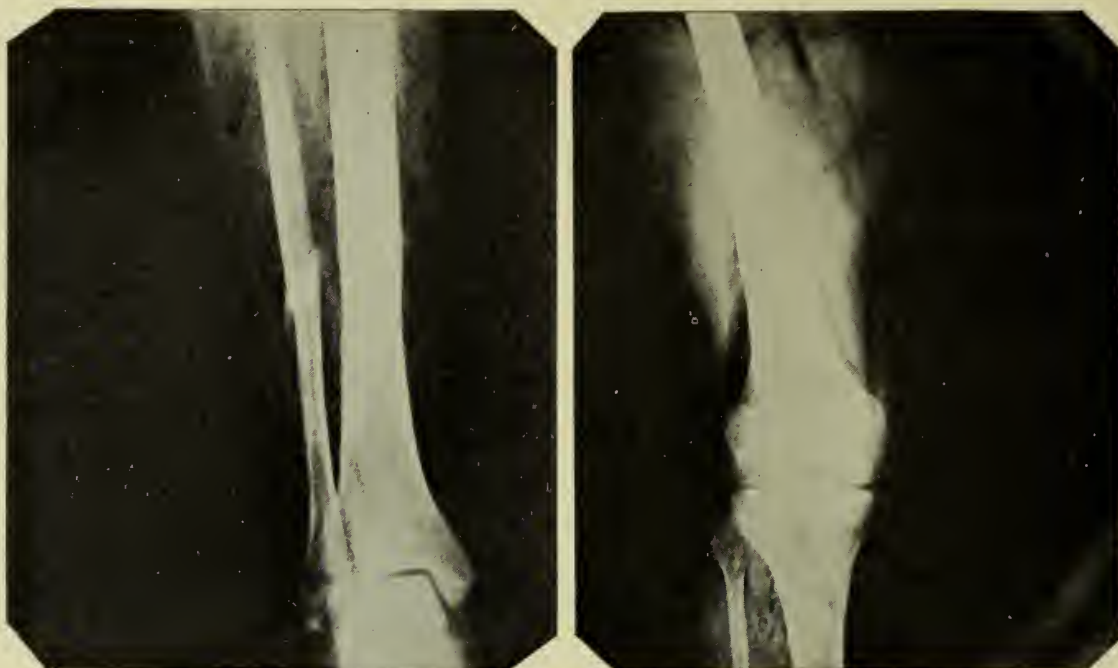


Figure 1. (Case No. 1). A young boy who fell from an apple tree, sustaining a compound fracture at the wrist, the wound being contaminated with dirt. The wound had the usual treatment and gas-gangrene promptly developed. The above photo shows the gas bubbles in the tissues of the arms extending as high as the clavicle. The patient had a shoulder joint amputation and several doses of Perfringen's serum. There were several secondary hemorrhages and finally the sub-clavian artery was ligated near the arch of the aorta and the patient recovered. (Case of Dr. B. H. Clifton.)

present. Cleanse the wound thoroughly with either hydrogen peroxide or a solution of potassium permanganate, leave wound open, and apply a wet dressing. The patient should be kept nourished, dehydration combatted by the administration of fluids subcutaneously or intravenously, and sufficient narcotics and sedatives should be given to produce rest. The chloral derivatives probably are better than morphine for the latter purpose and should be given in large doses by rectum as retention enemata. The prognosis largely depends upon an early diagnosis and the prompt administration of large doses of antitoxin.

Gas Gangrene

The conditions known as "gas gangrene" usually follows an injury or wound in which dirt, bits of soiled clothing, or other foreign bodies carrying the specific organisms, have gained access to the tissues. Prior to the World War it was a clinical curiosity; more recently it has become quite common. The military cases were the victims of a combination of contributory factors not present in civil life; men were exhausted by long con-



Figures 2 and 3. (Case No. 2). A man who sustained a compound fracture of the fibula, the wound being contaminated with dirt. The wound had the usual treatment and the above illustrations show gas bubbles in the tissues extending to the hip. This patient had an amputation just below the hip with several doses of Perfringen's serum and final recovery. (Grady Hospital case.)

tinued fighting, loss of sleep and forced marches, living under very exciting conditions and at times being wet, cold and hungry. Thus, with vitality at its lowest ebb, to have a shell fragment tear through mud-soiled clothing carrying large quantities of virulent bacteria deep into tissues was disastrous. Lacerated wounds, compound fractures, hemorrhage and shock, the interminable journey by stretcher and bouncing ambulance over rough, shell-torn roads before operative measures were available, complete a train of circumstances ideal for the establishment of gas bacillus infection. The organisms commonly concerned in gas bacillus infection are:

1. *Bacillus aerogenes capsulatus* (B. Welchii, B. Perfringens).
2. *Vibrio Septique* (B. Oedematis Maligne).
3. B. Oedematis.
4. B. Fallax.

The presence of aerobic bacteria in the wounds plays an accessory role. We are seeing more cases in civil practice now than formerly, most often as a complication in compound fractures. Dr. Frank Boland reported twenty cases occurring at the colored division of Grady Hospital, Atlanta, during the seven years, 1922-1929, fifteen of which were as-

sociated with compound fractures. During the same period of seven years there were ten cases in the white division of Grady Hospital, Atlanta, seven of which were associated with compound fractures. Thirty cases in one hospital in seven years, twenty-two of them with compound fractures, with a mortality of 40 per cent, make the condition well worth our consideration.

The symptoms are not characteristic, but are those of an early sepsis with a rapid rise in temperature and pulse rate shortly after an injury, which may occur within a few hours or may be delayed two or three days, but usually is in about eighteen to twenty-four hours. The patient usually appears sick, toxic and anxious, anemia frequently develops early, local pain and swelling are noticeable. There is often a characteristic odor about the wound, described as "musty or mousy," which appears early, and later the odor of dead human flesh. The skin is tight and shiny with a dusky pallor around the wound. There is usually no purulent discharge, but a red-tinged serum stains the dressing. The most characteristic sign is the feeling of crepitation under the skin adjacent to the wound, and often at a considerable distance above the wound. Gas bubbles may

be seen or may be milked out of the wound, but this may be a late manifestation. The gas-producing bacilli attack principally muscular tissue, usually in the presence of extensive contused and lacerated wounds. In compound fractures, where there is soil contamination, we should expect and anticipate a gas infection. The invasion progresses longitudinally in the belly of the muscle, an entire group of muscles often being involved, although the fascia of the individual muscle sometimes acts as a limiting membrane. The affected muscles become opaque, brick-red, bloodless and lose their contractility, later undergoing softening or necrosis and changing to green or black. When the bacilli are introduced, a rapid multiplication at the site of the injury takes place with the formation of gas which infiltrates the affected muscle and by pressure produces a complete anemia of the fibres with a resulting gangrene. The gas escapes from the individual muscle and spreads longitudinally in the cellular tissues upward and downward.

The systemic intoxication due to the highly toxic byproducts of the autolysis of the dead muscle, augmented by the rapid absorption of the toxins produced by the bacilli, overwhelm the patient. It has been shown that the toxin produced by the tetanus bacillus is a thousand times more toxic than that of the B. Welchii, yet death from a tetanic infection does not often occur sooner than several days, while in gas bacillus infection death may ensue within twelve to eighteen hours. There seems to be a selective action of the toxins for the suprarenal glands with a temporary lack of adrenalin from a suprarenal exhaustion. The pulse is soft and compressible as well as rapid and there is a fall in blood pressure. During the World War it was noticed that these cases were very susceptible to shock following operations, and it was understood that operative procedures for gas gangrene must be done rapidly with precautions taken to combat shock.

Gas gangrene cases are also very susceptible to secondary hemorrhage. It was our custom at the front to keep a tourniquet hanging on the head or foot of the bed in case it was needed. The infection apparently affected the walls of the arteries in the operative field

with a sloughing of the ligated stump, and about the fifth day often there occurred a fatal hemorrhage. This has occurred also in some of our civil cases. An open and lacerated wound is not absolutely essential for the formation of gas gangrene. I have had two such cases in civil practice, one a man who developed gas gangrene of the leg as a result of infection through a small trophic ulcer on the heel, and another a young woman who died with secondary hemorrhage following a shoulder amputation for gas gangrene, resulting from an automobile accident which bruised the upper arm but did not result in either a fracture or laceration of the skin. The infection evidently entered through a minor abrasion. Gas gangrene has been known to develop as a result of hypodermic injections.

The toxins elaborated by the gas anaerobes in their growth are considered as the final causative agent when death occurs. These toxins are two in number, one causing hemolysis with an early and marked anemia, and the other acting locally on the tissues and blood vessels, causing oedema and necrosis. A roentgenogram may show bubbles in the tissues even before crepitation is felt, and in suspected cases a roentgenogram should be taken every six hours for the first two or three days. The diagnosis of gas bacillus infection is not difficult if we are on the alert and always suspect it in severely lacerated wounds and compound fractures, when there is a possibility of soil contamination.

Hendry, in the British Journal of Surgery, January, 1930, reported several cases of "*latent gas infection*," with a prolonged history of vague pains and cramps in the muscles and periodic swelling with repeated breaking down of the old scar, occurring as long as ten years following the initial wound. The x-ray showed no gas bubbles in the tissues, but several of these cases developed acute gas infection with gangrene following a secondary operation.

Appropriate and energetic treatment applied at the earliest sign of gas bacillus infection may render the control a simple procedure, whereas if treatment is instituted after late signs are present, it may be difficult or impossible to control the condition, and a high mortality results. In the early months

of the war the mortality in gas gangrene cases was given by the French and British surgeons as 75 per cent. Bocker, a German surgeon, in 1915 stated that their mortality was 80 per cent. In 1916 the mortality was 52 per cent, but improved surgical procedures later reduced this to 26 per cent. This was done largely by having surgical units at the front within a few miles of the battle line, so that the wounded men could have the benefit of prompt surgical attention, before the anerobic infections had time to gain much headway. The surgical procedure was to thoroughly excise all damaged tissue, including the skin margins, and remove all fragments of bone and foreign bodies, such as bullets or shell fragments. It was especially important to excise all infected and devitalized muscle tissue adjacent to the wound. The ragged edges of the muscles were trimmed until all of the opaque, brick-red, dull-appearing fibres were removed and until muscle tissue was reached, which jerked and bled freely when cut. At first it appeared to the uninitiated to be a useless sacrifice of muscle, but the devitalized muscle harbored the gas bacilli and later developed gangrene, and its early removal saved later amputations and many lives. The French coined the word, *debridement*, to express this thorough excision and cleansing of the wound, and this term was later adopted by the British and Americans. Fractures were splinted and the parts put at rest, all wounds being left open, except wounds of the chest and abdomen. Irrigation of the wounds with chlorine solution, according to the technique by Carrel, was instituted when possible. At the front, we used dichloromine T. in oil to spray the wounds, dressing them lightly and *avoiding packing*. As soon as they were in condition to be transported these patients were sent to the base hospitals in the rear where the treatment was continued, and later, when the wounds justified it, secondary closures were done. When cases reached the front line hospitals too late for debridement, and gas gangrene had already developed, *high amputation* was performed, using the guillotine method, the wound being left open for irrigation. Blood transfusion may be done in patients with extreme anemia, but are of

doubtful value for the toxemia. Van Buren, in the A. M. A., 1919, gave an excellent outline of treatment directed toward the prevention of gas gangrene. It is as follows:

1. Operate as soon as possible.
2. Use nitrous oxide anaesthetic if possible.
3. Prepare the part with the minimum amount of delay and trauma.
4. Avoid tourniquets.
5. Make incisions longitudinally and half again as long as you think they need be both in skin and fascia.
6. Leave as much skin as you dare in debridement.
7. Go between, rather than through, normal muscles and do not cut across them unless you have to.
8. Open the wound as thoroughly and freely as you possibly can.
9. Excise all torn, crushed, discolored, non-contractile muscle until you have left only that which is firm, of normal color, actively contractile and which bleeds easily.
10. Make a careful search for and remove all loose bone and foreign bodies, especially clothing and blood clots.
11. Stop the bleeding, leave the wound wide open and separate the walls with net gauze, *laid in, not packed in*.
12. Use Carrel tubes if you know they will be properly cared for; otherwise omit them.
13. Use plenty of dressing and make careful splint fixation of the part.
14. Do it all as rapidly as you can.

Serotherapy, which we now consider equally important as early surgery, has largely been developed and perfected since the war. Scientists in France and England in 1916 to 1918 experimented with sera for the anaerobic infections with varying results. A polyvalent serum was finally made and used to some extent during the latter months of the war, but it was never available for universal use. In August and September, 1917, I was assigned to special duty under Dr. Carrel at the Rockefeller Institute in New York and had the pleasure of association with Dr.

Carroll G. Bull, who at that time was working on the serum problem for gas infections and who later perfected the polyvalent serum now in use. At the close of the war there being no demand for the serum, its manufacture was stopped. Now there is an increasing demand for it, and it is available in both prophylactic and curative doses. The prophylactic serum is put up in combination with antitetanic serum and should be given in all wounds and compound fractures where there is known or suspected soil contamination. The prophylactic dose of serum consists of 30 to 60 c.c., injected intramuscularly, the dose varying as to the length of time elapsing since the injury; the longer the time, the larger should be the dose. When gas gangrene has already developed, 100 to 200 c.c. of the polyvalent serum should be given intravenously and 100 c.c. repeated every six to twelve hours as the exigencies of the case demand. The serum should be heated to body temperature by immersing the glass container in warm water. In giving serum intravenously, the possibility of a reaction should always be borne in mind. There are three types of reaction:

1. *Serum sickness*, which occurs in 60 per cent of the cases, with a skin eruption, edema, enlargement of the lymph nodes, pains in the joints and a rise in temperature. Most commonly these symptoms appear in seven to twelve days after the injection of serum and while the condition is unpleasant, it is not dangerous and responds readily to treatment.

2. *Thermal reaction*, occurring in 40 per cent of the cases, is characterized by a chill and a rise in temperature within one or two hours after administration of serum. It is usually of short duration and of no serious consequence.

3. *Anaphylactoid reaction* occurs in about one to 20,000 injections of serum or antitoxin, with alarming symptoms which develop very quickly after the administration of the serum. The symptoms are extreme dyspnoea, nausea, rapid and feeble pulse, cyanosis and collapse. This condition may be fatal unless prompt treatment is instituted. When giving serum intravenously it is wise to have the proper remedies ready with a sterile hypodermic outfit, should they be re-

quired. The above symptoms are best treated by the prompt hypodermic administration of one c.c. of epinephrine (1/100 solution) or adrenalin, and atropine 1/100 grain. A second dose of epinephrine may be required if the symptoms do not rapidly improve. *The intravenous injection of serum should be given very slowly*, beginning with 1/10 c.c. during the first minute, and the first 15 c.c. at the rate of 1 c.c. per minute. Then, if no reaction occurs, the remainder may be given more rapidly. The serum may be diluted with saline or glucose solution to facilitate its administration.

Ivens reported a series of 453 severely wounded men who received polyvalent serum as a preventive measure within the first twenty-four hours after their injury. Some had shown early signs of gas gangrene. When the serum was given at or before the first operation, none died of gas gangrene and in many cases conservative treatment was made possible by the serum. Larson and Pulford reported a small series of gas gangrene cases treated with serum with good results. The literature does not give a large number of cases treated by serum, probably because no one man has had very many cases and hesitates to report individual cases.

There have been several cases treated with serum at the two units of Grady Hospital, Atlanta, with rather disappointing results, but it is thought that probably the doses given were not sufficient. Dr. Clifton reported one case in which he believed the antitoxin saved the patient's life. I had one patient, a young woman, with gas gangrene of the arm following an automobile accident with a severe bruise, but no fracture and no skin laceration. Following a shoulder amputation she was given 600 c.c. of serum in four doses and the infection was apparently under control, but the patient died following a secondary hemorrhage on the fifth day. It must be understood that serum therapy does not replace surgery in these infections, but the use of serum may make radical surgery unnecessary and does lower the mortality rate.

Summary

1. In all severely lacerated wounds and compound fractures, particularly when there is soil contamination, a prophylactic dose of

combined polyvalent anaerobic serum should be given within the first twenty-four hours.

2. In compound fractures combined with severe lacerations and when badly contaminated, give a *second prophylactic dose of antitetanic serum* on the eighth day, bearing in mind the possibility of an anaphylactic reaction.

3. When tetanus develops, the prognosis depends largely upon an early diagnosis and the prompt administration of large doses of serum intravenously. Smaller doses may be given intraspinally and intramuscularly.

4. The amount of serum administered varies, as to the *severity of the individual case*; however, *give all* that will be required within the *first few days*.

5. Gas bacillus infections, formerly considered a clinical curiosity, have become quite common in civil practice, most often occurring as a complication in compound fractures.

6. Gas gangrene has a high mortality unless recognized early and prompt treatment is instituted.

7. In early cases, "debridement" and polyvalent serum may conserve life and limb, but in late cases high amputation and serum are indicated.

8. Serum does not replace surgery in gas infections, but may make radical surgery unnecessary and lowers the mortality rate.

DIPHTHERIA MORTALITY IN LARGE CITIES OF THE UNITED STATES IN 1930

This report concerns the ninety-three cities dealt with in the recent article on typhoid, and the rates are calculated on the basis of the population figures used in that article. The number of diphtheria deaths in each city has been reported by the respective health departments. As in the article on typhoid, the diphtheria rates for 1925-1929 have been recalculated on the basis of the population figures of the 1930 United States Census. The report shows a remarkable decline in the general urban death rate from diphtheria throughout the country. In 1930 the lowest diphtheria rate yet recorded was reached, a rate a little more than half that obtaining five years before. Whether the recent sweeping reductions in diphtheria mortality in various parts of the United States have been caused by natural fluctuations in the disease itself or in the susceptibility of the human host, or whether and in what part they have been brought about by such preventive measures as toxin-antitoxin and toxoid immunization, is a matter on which convincing evidence may be forthcoming in the course of the next decade.—Abstract, *Jour. A. M. A.*

THE TYPHOID CARRIER*

T. H. JOHNSTON,† M.D.
Athens

Since typhoid fever has been unusually prevalent this summer in our section of the state, a brief discussion of the subject seems appropriate at the present time. This paper lays no claim to originality, it contains no new subject matter, every statement in it is most probably familiar to you. If, however, its presentation may refresh the memory with respect to certain aspects of the typhoid problem, then its purpose will have been fully served.

Time was when the sources of this ancient plague were little understood; when the laity (untaught by the profession) entertained notions on the subject, grotesque and bizarre to say the least. Even as biology teaches that all life arises from antecedent forms, so does pathology and bacteriology demonstrate that each and every case of typhoid arises from another of the same. The typhoid bacilli in a patient's tissues have always a human source which is never remote. The typhoid bacillus has an uncertain tenure of life in the outer world, and would disappear from the face of the earth in a matter of days were it not for the protection and sustenance afforded by the typhoid carrier.

Although divergent opinions exist among research workers, practically all are agreed that the life of the organism outside the body is comparatively short. When feces or urine containing typhoid bacilli are deposited upon soil, the organisms usually die out within a few hours; however, a few may survive up to the tenth day. Under the most favorable conditions they have been known to survive in the soil as long as ninety days.

Typhoid bacilli placed under natural conditions in a sewage polluted stream may persist up to 10 days, and for a longer period in clean water. Contrary to what one might suppose, they survive longer in water during winter months than in summer. This is in keeping with the incidence of various water borne epidemics of the disease that have oc-

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†Health Commissioner, Clarke County.

curred during the cold months, namely, at Plymouth, Pa., in 1885; New Haven, Conn., in 1901; Philadelphia in 1884; Paris in 1894, and Vienna in the year 1888. In ice made from polluted water, they are largely killed by the process of crystallization and not necessarily because of the low temperature. If ice is perfectly crystallized, it contains no air and this appears to be the deciding factor with respect to the typhoid bacillus, for it has been determined that the organisms can live for long periods in ice cream, a frozen mixture containing much air. Not a few typhoid outbreaks have been traced to contaminated ice cream. It has been shown that the bacilli may survive in oysters only so long as the oyster remains in edible condition. Although milk is commonly responsible for the transfer of the organisms they can live in that medium for but a short time; perhaps not more than 72 hours. Typhoid organisms deposited in a privy vault will usually die off within a few hours.

In brief, then, typhoid organisms under ordinary circumstances begin to diminish immediately upon discharge from their host. The exact duration of life outside the body depends upon such factors as food, temperature and moisture. Sunlight and extreme temperatures are unfavorable, so also is drying. Ordinarily, typhoid bacilli do not multiply outside the body. It is accepted as a generalization that under the usual conditions, the organisms survive only from two to seven days after excretion. From these considerations, it appears that the bacilli, left to shift for themselves, soon give up the struggle for existence. Thus their only hope of survival is to find prompt shelter within the human organism. If such is not forthcoming, that generation of bacilli must die and other generations supplied by the carrier of typhoid may (and do), by the laws of chance, finally gain a human host. The carrier is, therefore, the essential link between excreted and ingested organisms.

Typhoid organisms may appear in the stools and urine before or immediately after the onset of clinical symptoms; usually they are not found until after the first week of the disease. The fecal organisms are derived from the gall bladder and lymphoid tissues; uri-

nary organisms from the blood stream. The bacilli are constantly excreted during the course of the disease and until convalescence is established. At this time a majority of patients cease to excrete them, but a certain proportion do not, and hence become what are known as convalescent carriers. A convalescent carrier of typhoid is usually defined as one who has recovered from the disease but continues to excrete typhoid bacilli up to (but not more than) three months after convalescence has been established. The estimates vary as to the number of cases which become convalescent carriers. It is probably safe to say that 20 per cent of typhoid patients come within this class. It is interesting to note that a high percentage of children with typhoid become convalescent carriers but that the adult cases of typhoid contribute more largely to the class of chronic carriers. Certain of the convalescent carriers continue to excrete the organisms for an indefinite period. These are the so-called chronic carriers. It is stated that 10 per cent of all typhoid cases are included in this class. These are the individuals who serve to keep up the supply of organisms and make it possible for the susceptible to acquire the disease. More dangerous still is the healthy carrier who excretes the bacilli yet gives no previous history of a recognized attack of typhoid.

It has also been found that persons in contact with recognized cases of typhoid may excrete the organisms without themselves having the disease. Thus one investigator found the infection in four well persons who had been in contact with typhoid cases. Another examined forty persons who had drunk milk infected by a typhoid carrier. Of these forty he found fifteen who were excreting the bacilli yet only five of them were ill, the thirteen others were well persons exhibiting no signs or symptoms of the disease.

There is a case on record of a woman who had typhoid and later became a chronic carrier. During the period of convalescence her baby was born. A fecal specimen taken from the child at the age of four weeks showed the presence of typhoid bacilli.

Much research work has been done in recent years with respect to the chronic carrier. These individuals present certain fairly defi-

nite characteristics which must be taken into account. The carrier state is much commoner amongst females than males. Chronic carriers occur maximally between the ages of 40 and 45. As stated above, children are little likely to become chronic carriers. A carrier may be of the fecal type, urinary type or both. The fecal carriers constitute 90 per cent of the total.

The excretion of typhoid bacilli by a carrier is intermittent. Five or six specimens taken at intervals of days or weeks may prove negative and the next one turn out positive. It has been common practice to examine at least six specimens of stool or urine in the search for a carrier. This may prove inadequate. Some state health departments examine routinely daily specimens for thirty days and in this way discover carriers previously missed.

The infection of a member of the family or of a contact of a chronic carrier is an accident. A carrier may go several years without infecting all members of his or her own family, but usually there is a history of cases occurring in the family or among relatives and neighbors from time to time.

The effectiveness of a carrier varies. Some carriers excrete more constantly and larger numbers of bacilli than others. The intelligence and cleanliness of the individual will determine how often organisms are on the hands. Obviously, the carrier who is a handler of food is more of a menace to the community than others not so engaged.

Typhoid carriers are, for the most part, unaffected by their own condition. If they are fecal carriers, the point of localization is nearly always in the gall bladder and though few of them have gall bladder symptoms, there is usually a low grade cholecystitis with the ultimate formation of gall stones. The discovery of typhoid bacilli in the interior of gall stones is not a rare occurrence and may suggest that typhoid has a place in the etiology of gall bladder disease.

In the case of urinary carriers, the principal source of the bacilli is the pelvis of the kidney and not in the bladder, although a secondary focus may be found in that organ.

Typhoid is not the menace that it once was, thanks to advances in sanitation and the

widespread use of anti-typhoid vaccine. Notwithstanding these defences, we shall from time to time experience outbreaks of the disease until we have devised effective methods for dealing with the typhoid carrier. Such a plan would depend upon the combined activities of the medical profession, public health organizations and governmental agencies.

Conclusions—I. Only through the active interest of practicing physicians can we discover who is and who is not destined to become a chronic carrier.

II. It should become the function of public health organizations to keep a complete and accurate registry of all typhoid carriers to the end that their movements may be known and the public health safeguarded accordingly.

III. It should be a duty of the state to provide a fund for the relief of those who are unfortunate enough to become carriers of typhoid. This fund could be used in aiding these individuals to make a change of occupation where necessary in the interests of the public health.

It may be that at some distant time, provisions similar to the above will come into effect. Until that time, we may expect periodic recurrences of a disease that need not be tolerated.

PATHOLOGY OF SICKLE-CELL ANEMIA

Wallace M. Yater and Mario Mollari, Washington, D. C. (*Jour. A. M. A.*, May 16, 1931), give the clinical history and postmortem observations in a case of sickle-cell anemia in which the patient died during an "abdominal crisis" apparently as the result of an arterial thrombosis of the liver. They state that the pathologic changes of sickle-cell anemia are distinctive, particularly as regards the spleen. The spleen becomes markedly atrophic, the pulp diminishes, the malpighian bodies disappear and calcium and iron incrustations are prominent. The liver and kidneys contain iron incrustations, and the kidneys also have calcium deposits in their tubules. The bone marrow is hyperplastic. The spleen plays more than a minor role in the disease; more splenectomies should be performed as early as possible in an effort to produce at least a symptomatic cure.

TUMORS OF PARATHYROID GLAND

Clarence G. Toland, Los Angeles (*Journal A. M. A.*, March 7, 1931), gives a short synopsis of the present clinical aspects of the parathyroids and their pathology and reports two cases of parathyroid tumors.

THE MENTAL DISEASE PROBLEM IN GEORGIA*

R. C. SWINT†, M.D.
Milledgeville

Mental disease is a problem that vitally concerns every citizen of this commonwealth, but it is given little thought by the average person or family until some of their loved ones or friends become so afflicted. It is one of the largest and most important public health problems confronting the state. Records of instances of mental disease are coexistent with the beginning of history, and in order to get a correct viewpoint of the subject, it might be well if we review a little of the history of the treatment of mental patients; but, no matter how briefly sketched, we cannot avoid a chamber of horrors where we become acquainted with some of humanity's most distressing family skeletons, because, before the erection of institutions for the treatment of mental diseases, these unfortunates were placed in jails and almshouses as common criminals and outcasts, where abhorrent practices, heaped upon them, stand as a blot to civilization, and yet, because of inadequate facilities to meet this problem today in Georgia, we are compelled to force many of these unfortunates to remain locked in the county jails of the state until room can be provided for them at the State Hospital, and room can be provided only as vacancies occur from a death or discharge, as the hospital is now 900 patients overcrowded above its normal capacity. This condition is inhumane, cruel, barbaric and a blot on the civilization of this era and should not be tolerated. However, it is much easier to get the public mind, the minds of legislators and governors, interested in the more popular topics of the day. We often delude ourselves and think we have a modern and humane understanding of the situation; but, it is sad to relate, although nevertheless true, we have never completely eradicated from our minds the primitive superstitions concerning the problem.

Pardon this digression, and, returning to the subject, we may say that for practical purposes, the history of the treatment of mental disease may be divided into two periods:

1. The premodern period.
2. The modern period.

The premodern period extends from the beginning of history to a little over 100 years ago, and it is filled with superstitions and practices due to the ignorance of the

primitive people. They thought that insanity and other human ills were due to demons taking possession of the body, or to magic wrought upon the individual by some enemy. For a long time the Christian era held that mental disease was a punishment for some sin and, therefore, sent by God, and that He would remove it if sufficiently propitiated by prayer and sacrifice. It is interesting to know that they utilized what knowledge of herbs and drugs they possessed rather than depending entirely upon magic rites and divine intervention.

The modern period may be said to extend from the beginning of the nineteenth century to the present time. During this time a decided change in the concept of mental disease has been brought about, and it is encouraging to note that the public is coming more and more to the idea that the unfortunates afflicted with mental disease are just as truly sick as those individuals who are ill with some physical disease. While the nineteenth century was devoted mainly to securing humane treatment and custodial care, the accomplishments and progress in psychiatry during the few years of the twentieth century compare favorably with the progress of other branches of medicine and other sciences. Since the beginning of the twentieth century psychopathic hospitals have been established for the research study of acute mental cases. Extramural psychiatric clinics have been organized and maintained by state hospitals in order to give advice and treatment to paroled patients and many patients who are able to remain out of institutions. Psychiatric social service has been started, and the mental hygiene movement founded, organized and firmly established. I think that we might say that scientific psychiatry has approached the study of the causes and pathology of mental disease in two ways. The earliest was through the study of the brain and other bodily structures as influencing mental processes. The other a study of the physiochemical processes, such as research concerning the changes in blood chemistry in certain types of psychoses or the functions of the endocrine glands. With few exceptions, the status of these findings are somewhat analogous to the old controversy surrounding the James-Lange theory of the emotions: "Do we fear because we tremble, or do we tremble because we are afraid?" Do we become mentally unbalanced because of changes in blood chemistry or other physical states, or are these changes a result of the mental illness? Twentieth century psychology has made some contribution to the progress and our present understanding of the problems in mental dis-

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†Superintendent of the Georgia State Sanitarium, Milledgeville, Ga.

orders. Janet's famous studies of hysteria, Sigmund Freud's psychoanalytic method, the contributions of Cannon, Kraepelin, Mott, Adler, Jung, Meyer, White, and others, have been shining lights to much of the way, so that now we may anticipate further progress through the coming years.

Modern psychiatry emphasizes the importance of studying the individual as a whole. In no other branch of medicine is it so important that such be done. It is now a consensus of opinion among psychiatrists and psychologists the requirements for health necessitates an integrated personality, and I mean by that the whole organism is integrated, it reacts as a whole, the mind and body react together to the various situations of life. For instance, in ordinary conversation, we refer to the normal man as "all there," and nothing better expresses the condition of a man who has broken down than the every-day phrase, "he has gone to pieces." Furthermore, we now know that the mind should be given as much attention as the body. Man has been considered too constantly from the standpoint that he is a rational animal when, in reality, he is predominantly an emotional being, always has been and always will be. Therefore, keeping emotionally fit is of far more importance than keeping intellectually fit, from an adjustment standpoint. The primary use of intelligence should be to control emotions, particularly is this true during the early years of life. It does not matter so much as to whether children from seven to ten years of age learn much from books, but the learning of emotional control should not be neglected. For efficiency and happiness there must be emotional control. The angry individual cannot think clearly, the person in fear of losing his job does poor work.

Scope of the Problem

For many years a serious attempt has been made to get accurate census of persons afflicted with mental disease. At this time it is estimated that there are being cared for and treated in mental hospitals in the United States around 300,000 patients, or about 30,000 more than all patients in general hospitals devoted to the treatment of those physically ill. There is an overcrowding in mental hospitals everywhere. It is estimated that 80,000 patients are admitted to mental hospitals in the United States annually. H. M. Pollock, Director Statistical Bureau, Department Mental Hygiene of New York State, after an extended study of statistical data, estimates that 4 or 5 per cent of the nation's population will at some time of their lives receive treatment in a mental hos-

pital. If we apply this estimate to Georgia, with a population of 2,900,000, we might say that over 100,000 of our citizens are actually or potentially psychotic. However, we have some consolation in knowing that Georgia and other Southeastern states, with more or less of a rural population, has a smaller number of individuals afflicted with mental disorders than the Northeastern and Western states that have a more urban population. In this connection, it should be of interest to note the growth or increase of mental disease in Georgia by decades, since 1846, when state care was adopted. Since Georgia has only one state hospital, the growth of the patient population of this hospital gives an idea of the increase of mental disease in the state, as the population of the state increased. These figures do not show the many borderline cases who remained out of the hospital, nor those who received treatment in private institutions, nor those other maladjusted individuals with a diminished or no earning capacity for their families.

Date	Pop. of Hosp.	Increase	State Pop.
1846-1856	72- 161	89	691,000
1856-1866	161- 299	138	906,000
1866-1876	299- 604	405	1,057,286
1876-1886	604-1238	634	1,184,109
1886-1896	1238-2002	764	1,542,180
1896-1906	2002-3018	1016	1,837,353
1906-1916	3018-4115	1097	2,216,331
1916-1926	4115-4848	733	2,609,121
4-year period			
1926-1930	4848-5291	443	2,900,000

On account of overcrowding of the hospital, the ten-year increase from 1916-1926 was not as great as it would otherwise have been. Some thought given to the above figures gives an idea of the tremendous problem and the greatest cost is not in dollars and cents, but the heartaches, misery and general failure to meet responsibilities and requirements of normal citizenship.

From a half to a century ago, when an individual became afflicted with a serious mental disorder, he was isolated and tied up, and his illness aggravated by treatment. When admitted to an institution there was little chance that he would return home to beget more children. Twentieth century psychiatry has made the lot of these most unfortunate ones less wretched. The modern treatment given them today in mental hospitals results in 50 to 60 per cent of those admitted becoming restored or improved and are paroled into the custody of their relatives. This means, if they are married, they return to their wives or their husbands, and, frequently, it means that they produce more children and their defective constitutions are passed on to

more of their descendants. That these defects are already widely scattered through the germ plasm of the state and nation is more or less indicated by the fact that many of the people who develop mental disorder are not the children of the parents who have, or had, mental disease, but are of families who carry this weakness by inheritance.

Statistical data shows an inherited taint in 60 to 75 per cent of the various types of mental disease, and, if the truth was known, this percentage would probably be greater, as it is very difficult to get the truth about these matters.

Let us keep in mind this fact, however: that we do not inherit mental disease, just as we do not inherit tuberculosis, but we do inherit a predisposition to develop it under stress, whether this stress be disease (physical), bad environment, endogenous or exogenous toxic factors, repressed complexes, conflicts, or what not.

The question may arise in your minds that science has not yet determined the exact mode of inheritance of traits in man, and that society is not yet justified in formulating definite conclusions about these matters. It may be true that the exact mode of inheritance as to whether the trait is inherited or capable of being transmitted. After more than a quarter of a century of study and observation concerning these matters, I am fully convinced that we have enough information to conclude that heredity is a predisposing factor in the causation of mental disease and feeble-mindedness, and, that if we applied the principles of the Mendelian law to the human family, as we do to animal and plant life, it would result in the betterment of the human race. Let us review some of the theoretical expectations that may be formulated from the Mendelian law as applying to mental disease.

1. Both parents being psychopathic, all children will be psychopathic.

2. One parent being normal, but with psychopathic inheritance from one grandparent, and the other parent psychopathic, half the children will be psychopathic and half normal, but capable of transmitting their psychopathic make-up to their progeny.

3. One parent being normal and of pure ancestry, and the other parent psychopathic, all the children will be normal, but capable of transmitting their psychopathic make-up to their progeny.

4. Both parents normal, but each with a psychopathic inheritance from one grandparent, one-fourth of their children will be normal and not capable of transmitting any taint, one-half will be normal, but capable

of transmitting an inherited taint, and the remaining one-fourth will be psychopathic.

5. Both parents being normal, one of pure ancestral inheritance, the other with a psychopathic taint from one grandparent, all the children will be normal, half of them will be capable of transmitting their inherited taint to their progeny, and half of them will not be capable of transmitting any inherited taint.

6. Both parents being normal and of pure ancestry, all the children will be normal and not capable of transmitting any psychopathic taint to their progeny because they have not inherited any to transmit.

With these theoretical expectations before us and supported by statistical data and other practical observations, I think it may be safely said that a movement to prevent mental disease cannot overlook the problem of bad heredity, and I am fully persuaded that no mistake will be made if we should concentrate our energies on this feature of the mental disease problem and endeavor to have some definite remedy applied for the betterment of heredity.

The remedies that have been suggested for combatting bad heredity are: Legal restriction of marriage, segregation and surgical sterilization or eugenic sterilization if you prefer to call it that.

Legal restriction of marriage has but little merit to consider, and would not be practical.

Segregation has more merit, but is too tremendous an economic problem to anticipate. We can anticipate surgical sterilization, because it is practical and the economic cost for putting the law into effect would be small if such a law that California now has should be enacted.

The operation for eugenic sterilization produces no change in the sex life of the individual. No organs or glands are removed, and no feelings are altered. Eugenic sterilization decreases misery by protecting from parenthood those who are manifestly unfit to be parent of sound children. It benefits the patient, the family and the state. It is one of the indispensable measures in any modern program of social welfare.

It would permit many homes to be kept unbroken, and allow many individuals unfit, to marry and live normal lives that would otherwise result in bringing burdens to individuals, families and the state.

Twenty-three states now have sterilization laws on their statute books, viz: Arizona, California, Connecticut, Delaware, Idaho, Iowa, Kansas, Maine, Michigan, Minnesota, Mississippi, Montana, Nebraska, New Hampshire, North Carolina, North Dakota, Ore-

gon, South Dakota, Utah, Virginia, Washington, West Virginia, and Wisconsin.

I do not think that we can evade the fact that "the individual is wholly and solely the product of his heritage and his experience." Therefore, if we are to have a finer and more salutatory conduct, it can only be obtained by giving the individual a better hereditary endowment, and a better environment in which to develop it. Then, it is truly said, "Genetic wisdom is the fundamental requirement in managing human affairs."

Is a feeble-minded child likely to become a scholar?

Will a boy with a club foot win medals at an athletic contest?

Can an individual with a cleft palate develop into an orator of note?

Of course, we know that they cannot do these things.

The fundamental requirement for a sound mind and healthy body is a proper ancestry; but, if one wishes to make the best of the bargain, after having had his ancestors chosen for him, he should look to his food, his rest, his recreation and his habits. A child cannot become great unless he has capacity in his make-up, but he will not become great under any circumstances if his talents are kept rolled up in the proverbial napkin.

In spite of all the doubting Thomases, we know a great deal today concerning the respective roles of heredity and environment, and the precise way in which the parts are played. Twenty-five years ago, heredity was almost a synonym of mystery. Not so today. Laws of heredity have been formulated, as definite and precise of those of physics and chemistry. Many minds and many hands have been planning and executing intricate experiments designed to answer the question, "what makes us what we are?" And they have had a marvelous success. It may be truthfully said that genetics has been one of the most profitable branches of twentieth century biology. Let us get the idea of Sir George Newman: "The real object of preventive medicine is to build a better tabernacle for the soul of man to inhabit."

Ladies and gentlemen, this problem is one of facts and not fancies. If we wish to make some real contribution for the betterment of the human race, there is an opportunity in this problem.

It is said that the United States government is annually spending \$300,000 for the betterment of animal life from the heredity standpoint, but not one penny for human betterment. The individual stock breeder, poultryman, florist, and farmer are spending vast sums for betterment each year, and they

know from experience that it pays and that they dare not neglect the matter if they expect to succeed. Is the matter of the betterment of the human race of lesser importance than these other things?

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ACUTE APPENDICITIS*

With Special Reference to Differential Diagnosis

C. W. ROBERTS, M. D.

Atlanta

A physician who makes a high percentage of correct diagnoses, in any given malady, is often spoken of as a genius, in common American slang is popularly known as a wizard. A genius has been defined as one who is habitually inspired. Inspiration has been pertinently defined as an attribute constituted by one per cent inspiration and ninety-nine per cent perspiration. I like this definition since it introduces a quality which I believe lies at the very fountain head of all diagnosis. The average doctor has probably entered too largely, for his own good and that of his patients, into the great American pastime of idleness, failing to sense that the royal road to diagnosis, if there be one, is along the uneasy pathway of hard work. Diagnoses are not made at the bedside, but rather culminate there. The labor comes at one's own fireside, supplemented by careful clinical observation, by frequent visits to the clinics of the masters, by attendance on medical meetings and the free interchange of ideas among one's confreres.

The above sentiments definitely suggest the fallacy which I believe has long surrounded the question of appendicitis and particularly its differential diagnosis. Some one has said that General Grant knew only two tunes. One was Yankee Doodle and the other was not. Had his musical education

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introduced him to several melodies, his diagnostic ability in this realm would have been more difficult. Many physicians likewise know two causes for acute abdominal pain—appendicitis positive and appendicitis negative. Until many such diagnoses were proven to be pneumonia or acute salpingitis, coronary thrombosis or rupture of an abdominal viscus, the professional skill required to solve true appendiceal pathology was easy. We now recognize that the portly mid-section of the anatomy, crying with pain of the green apple vintage, is one of mystery and cannot be dismissed with a Grantian type of consideration. A discussion therefore, of this subject, is too often deferred and its importance dismissed on the grounds of a study in ancient history holding no challenging interest. But may we not again inquire, are all practitioners masters of appendiceal diagnosis, or is the disease being efficiently handled, in the average community?

The importance of the subject needs no emphasis in the light of these questions among the well informed. It remains the most common abdominal emergency, requiring quick and correct diagnosis, sharing with perforation of viscera, intestinal obstruction and rupture of tubal pregnancy, the dangers incident to delay. One cannot too often emphasize that a diagnosis in any of these conditions, made later than twelve to eighteen hours, is fraught with a terrifying death rate. Diagnosis within these golden hours rarely fails to save the patient.

A discussion of the causes underlying the frequency of this disease are not in this connection of material value. Suffice it to say that we are confronted with a real condition occurring frequently in the practice of every physician and requiring at our hands an appreciation of its high rank as a cause of death among a productive group of the population. The incidence of the disease seems to increase with the privileges conferred by higher civilization. The control of its incidence belongs rightly to the domain of internal medicine, but the institution of measures for the reduction of its mortality and morbidity, standing as a blot against the progress of surgery for the past fifteen or

twenty years is peculiarly the responsibility of the surgeon. We need to be often reminded that the death-rate in acute appendicitis, with its complications, has long stood at about 10 per cent, taking the average from hospitals throughout the country. It is heartening to note, however, that in selected clinics and in communities where the gravity of this situation is generally appreciated, the mortality has been reduced to around five or six per cent. In the Georgia Baptist Hospital, for the years 1926-27, there were four hundred and twelve cases of acute appendicitis operated upon with a mortality of $5\frac{1}{2}$ per cent. This mortality, however, must not be considered a satisfactory improvement. Our goal must take into account that every death from appendicitis might be prevented and therefore is unnecessary.

May I repeat, by way of emphasis, that two outstanding causes of the high death-rate are as follows: First, a wide-spread failure to appreciate the necessity of diagnosis within the first twelve to eighteen hours. Second, failure to realize that deaths in appendicitis are due to complications and not to primary disease. There is one attenuating circumstance which deserves mention—we need in this State available hospitals suited to the economic needs of our people. Where well equipped hospitals exist a standard is soon set up which meets the needs of this abdominal emergency and the death-rate immediately falls. We should back up a state-wide hospital program.

Diagnosis in any malady requires a virile type of doctor. As has been indicated, the explanation of symptoms calls for the exercise of discriminating judgment. Too frequently, however, it is failure to use what one knows rather than a failure to know. It is not so much incapacity on the part of the rank and file of our profession, but rather indifference to one's responsibility. Even when a diagnosis is suspected there is often lack of the mental force required to secure prompt action. Patients will not submit to operation when their physicians manifest an attitude of indecision. Having plotted a course of action, the physician should take a definite stand with patients when they will rarely refuse to be responsive to their doctor's advice. There

is a type of physician too, and I believe a common type, who places a glamor around the work of the surgeon and fails to appreciate that diagnostic ability is a higher accomplishment and always precedes the work of the surgeon and largely determines the outcome of cases submitted to operation. His compensation should be commensurate with the high order of such service. The type of physician desired is probably born and not made by medical schools. Such men continue their development after medical school days by remaining students and constantly refreshing their knowledge by attendance on clinics and frequently post-graduate courses. To me it has always been refreshing to be reminded that knowledge belongs to no aristocracy. Here secrets yield to the earnest, plodding doctor, regardless of his location or circumstance. Not to know is no disgrace, but failure to find out surely is open to grave criticism. The type of doctor that makes a diagnosis early in acute appendicitis is the physician who is always seeking to find out and who refuses to rely too much on luck. This thing called luck is simply pluck, and everlastingly keeping at it, hard work and skill, perseverance and will are the four leaves of luck's clover.

The typical case of acute appendicitis tells its own story. It is characterized by a chain of symptoms which follow a definite order. These are abdominal pain, felt more in the epigastrium, nausea or nausea with vomiting, tenderness over the lower right quadrant, fever and leukocytosis. A well elicited time-consuming history should strongly suggest the diagnosis in 85 per cent of the cases and is, therefore, the first essential step. Doctors have been riding so fast since the advent of the automobile that they fail often to take enough time at the bedside to secure a careful, correct, sequential history. It is well here to remember that the diagnosis in the typical case is much easier in the first twelve to eighteen hours than after the onset of complications, which always becloud the issue. Unfortunately it is the atypical case which occurs so frequently to confuse us and which is responsible, no doubt, for so many mistakes. It is the atypical case which requires expertness in differential diagnosis. To

this phase of the subject we will return later.

One feels almost like offering an apology for referring to certain fallacies still too prevalent among a group of our fellows who, let us believe, do not attend clinics and medical meetings. I refer to the common use of purgatives and resort to the hypodermic before the diagnosis is made. Some one has aptly remarked that the place for the hypodermic before the diagnosis, is to be locked in a vault with the combination lost. One might with equal emphasis say the same about purgatives. There are other fallacies which are entertained by even the alert group of practitioners and surgeons alike. These include too much dependence upon the leukocyte count, failure to interpret the serious import associated often with early subsidence of pain and fever, the attempt to make a fine-spun diagnosis covering the exact extent of the pathologic change in the appendix before advising operation and lastly, the ostrich-like doctor who, fearing the consequence and unable to unravel the symptoms in a given case, prefers to bury his head and trust to luck rather than call early consultation.

Coming now to speak more specifically of differential diagnosis. Pain has always been a salient factor in acute abdominal conditions, its severity being highly suggestive of the gravity of the problem in hand. I think of it in three degrees: *First*, great or agonizing pain, usually causing doubling-up of the patient and attended by a degree of shock with sweating, pallor, weak pulse and usually subnormal temperature. This type of abdominal pain does not regularly belong to appendicitis. It argues in favor of rupture of some viscus—gall bladder, gastric or duodenal ulcer, typhoid ulcer—tubal pregnancy, acute enterospasm, mesenteric thrombosis (so-called abdominal angina), twists of ovarian cysts, pedunculated uterine fibroids, kidney colic, hepatic colic—coronary thrombosis or acute hemorrhagic pancreatitis. *Second*, moderate pain, a type of pain not attended by such agony as is associated with the first type mentioned, but yet such pain as causes restless moving about in the bed, with periods of complete or partial relief, followed by reactivation, inability to sleep except for short intervals, and yet not pre-

sending evidences of shock. This type of pain is compatible with appendicitis, cholecystitis, the colic of mucous colitis, ureteral stricture, intestinal obstruction and the colics due to increased peristalsis associated with enteritis from decomposing food remains in the intestines. Lead colic and the crises of tabes may be put in this group. The *third* degree covers a large group and leads to most of the confusion suffered in abdominal diagnosis. If one carefully inquires, patients in this group will acknowledge that the symptoms they call pain could be expressed by some other term such, for instance, as fullness, heaviness, dragging down, soreness, a sensation of constant motion, etc. Such symptoms are readily recognized by the careful physician as expressions not of an acute abdominal condition, but associated with the asthentic habitat. Such patients need careful study, but are never candidates for operation until a discriminating diagnosis has been made.

Appendicitis must be differentiated from other conditions in the abdomen, as well as those arising outside this cavity. Those within the abdomen, and more commonly met, are intestinal obstruction, rupture of a viscus, twisting of the pedicles of cysts and fibroids, volvulus, diverticulitis, acute cholecystitis, pancreatitis, mesenteric thrombosis, pelvic inflammatory diseases and such medical conditions as acute enteritis, the colic of mucous colitis, lead colic, etc. The common conditions outside the abdomen, but referring symptoms to it, are pneumonia, diaphragmatic pleurisy, diseases of the heart and particularly coronary thrombosis, the crises of tabes, irritation of spinal nerves by Potts disease, spinal cord tumors or arthritic changes in the spine, kidney colic induced by stones or by ureteral obstruction and such infections as pyelitis. These various diseases should be catalogued in one's memory, because if they are remembered in connection with abdominal symptoms a correct diagnosis will more often be made.

It is of academic interest only to undertake to differentiate between the types of acute appendicitis. They are usually considered under three groups. Acute catarrhal appendicitis, varying in degree with the depth of

invasion of the appendiceal wall by the infectious process, acute perforative appendicitis, or so-called fulminating appendicitis, due usually to perforation at the seat of a chronic ulcer in the appendix resulting from fecaliths and acute gangrenous appendicitis due to stricture or obstruction by fecal stones with superimposed inflammation. In this important group there is early interference with blood supply, resulting in gangrene. I think it worthwhile to dwell briefly on gangrenous appendicitis. Abdominal colic is severe and comes in waves, due to effort on the part of the appendix, to extrude the obstructing element. There may be early leukocytosis and constitutional reaction signs such as fever and increased pulse. Danger to which I wish to call particular attention lies in the fact that with the onset of gangrene, which occurs within twelve to eighteen hours, there is subsidence of pain, drop to normal in leukocyte count and often a normal temperature and pulse without any marked rigidity or sensitiveness. Dead men tell no tales and gangrenous appendices are likewise silent. This type is responsible for a great many of our tragedies in appendicitis. The diagnosis must be made largely by history and operation should always be done within the first eighteen hours and where there is doubt as to the existence or non-existence of this type an exploratory laparotomy should be done. In contradistinction, the acute catarrhal and the acute perforated types are attended by increasing constitutional symptoms as time passes and therefore, sooner or later, force a diagnosis, but frequently so late that fatal complications have ensued. Systemic symptoms may ameliorate, but they do not abruptly subside.

Coronary thrombosis is characterized by sudden, severe retrosternal and epigastric pain, which, unlike ordinary angina pectoris, continues long, is not brought on by effort and may radiate into both arms, but is not relieved by rest or by large doses of morphine. There is severe general prostration, shock-like in type, with developing signs of circulatory insufficiency. There is feebleness of the heart's impulse, dyspnea and cyanosis. There is slight fever with leukocytosis with marked reaction in the polynuclear count. The acute

digestive disturbances, such as nausea, vomiting and epigastric pain, may simulate the symptoms of acute surgical emergencies in the abdomen. However, the ashen gray facies, the cold, clammy perspiration and the severe mental anxiety, a feeling as it were of impending death, leaves no doubt in the mind of the serious clinician that one of the larger branches of the coronary artery has suddenly been occluded. In order to make the diagnosis the physician must think of the possibility of coronary occlusion. If this malady is borne in mind there will be fewer deaths from so-called acute indigestion and fewer abdomens will be unnecessarily explored by surgeons for acute appendicitis, for acute gall bladder involvement, or for ruptured gastric or duodenal ulcer. The malady is far more common than the average practitioner believes. He must therefore, be ever on the lookout for it. The patient is usually of mature age, forty-five or over, the average around fifty-four. Only rarely are younger people attacked and then usually because of infectious arthritis. Males suffer more frequently than females. In this disease, when the diagnosis is made, there should be early administration of large doses of morphine.

The features of typical biliary colic are well known and need not be recited in detail. If the patient is seen in the attack the symptoms will center around the upper right quadrant. If not seen in the attack a well taken history will put the physician on the right track. In the differential diagnosis one must think of renal colic, Dietl's crises and pyelitis. In the conditions of the kidney the pain is in the area of the renal fossa, usually radiates down toward the bladder and is accompanied by disturbance of urination. The urine should always be examined, better several specimens, and always a catheterized specimen taken. In peyelitis there is fever usually higher than in acute gall bladder disease or acute appendicitis and there is marked leukocytosis, but always in the urine, if repeatedly studied, there will be found the tell-tale pus cells, which must point to the real diagnosis. In acute appendicitis there is sometimes a confusing picture. This is particularly true when the appendix is retrocecal or turned upward, under or toward

the liver. The points of differential diagnosis are that careful palpation in appendicitis will usually show tenderness a little lower than in gall bladder disease. Rectal examination, which should always be made, may show a mass or tenderness low in the right side. The leukocyte count is usually a little higher in appendicitis, but the finding of a high leukocytosis, associated with previous attacks of nocturnal pain, is indicative of acute gall bladder disease. Loin tenderness is more common in appendicitis than gall bladder disease. In ulcer of the stomach and duodenum the clean cut history of food ease and ease by taking of soda with definite periodicity and chronicity are the symptoms which should point one to the right diagnosis. We can be helped in this disease by x-ray. In any case where the history is of being awakened at night with sudden pain, I should consider that the diagnosis is rather gall bladder disease than appendicitis. Visceroptosis producing drag on the structures of the abdomen, with irritation of the sympathetic plexuses, with pyloric spasm, will give symptoms such as those seen in gall bladder disease or in Dietl's crises. Here the general appearance of the patient should be a key to the possible diagnosis. Food poisoning, while a cause for acute symptoms in the abdomen, is too often mistaken for some of the acute surgical conditions. Here a careful history again and a thorough physical examination should keep us from falling into a trap.

In acute pancreatitis there is greater shock, the pain is more persistent, there is tenderness and swelling and fullness in the epigastrium. There is a peculiar subcyanotic hue. The picture is one too of much more profound catastrophe than occurs in biliary colic or appendiceal disease. The temperature is usually higher than acute cholecystitis or appendicitis, although the temperature at times in the beginning may be subnormal. In coronary thrombosis or angina pectoris, which usually occurs in high middle life, there is a marked drop in the systolic blood pressure, often as much as 50 to 100 millimeters. One should always palpate the dorsalis pedis artery to determine whether pulsation is present. When it is absent it indi-

cates an advanced degree of arteriosclerosis. The pain of acute pericarditis is often referred to the abdomen. The mistaking of pneumonia for appendicitis is well known. If one is on the alert, however, this condition in the chest should be suspected due to the ordinary clinical evidences of the disease. Diaphragmatic pleurisy refers symptoms to the abdomen and calls for careful investigation. It must always be borne in mind as a possibility. The gastric crises of tabes must also be borne in mind. There is no other way of avoiding pitfalls in this instance than to bear in mind in every atypical case the possibility of this malady. One should always test the reflexes, particularly of the eyes and knee jerks. The Argyll Robertson pupil reflex and absence of knee jerks should focus attention on a tentative diagnosis of tabes. Attacks of gastric crises as a rule last much longer than attacks of biliary colic or appendicitis. The pain does not radiate to the right shoulder, the attacks usually persist for one or two weeks regardless of what is done medically.

Lead colic may simulate biliary colic or appendiceal disease. Its presence may be suspected when the following conditions are observed: First, when the patient has been exposed to lead accidentally or in his occupation; second, if there is a blue line on the gums; third, if there is stippling of the red blood cells. Herpes zoster must be borne in mind. The pain here is of neuralgic type, darting, burning, and is followed in twenty-four to forty-eight hours by an eruption. Abdominal pain, connected with gynecologic conditions, must be differentiated. We have to consider here the question of abortion, ectopic pregnancy, acute salpingitis, acute pelvic appendicitis, twisted ovarian cysts, twisted pedicles of fibroids, pyelitis and the pain occasioned by ureteral stricture. Abortion can be diagnosed if a careful history is taken. In abortion the flow is red in color, is profuse and usually precedes the pain, which is not severe, but cramp-like in character, bearing down and located in the back and lower abdomen; whereas, in ectopic pregnancy, with rupture or hemorrhage, the bleeding is dark brown in color, is not so profuse, usually follows the pain, which is severe, lancinating and located primarily in the right or

left lower quadrant. The diagnosis may be aided by a careful bimanual examination, as well as a careful history. The onset is sudden and there is prostration. In abortion the vaginal bleeding is the predominating symptom, with the pain secondary, while in ectopic gestation the abdominal pain and the degree of collapse are the important factors, with the vaginal hemorrhage a secondary consideration. In acute salpingitis the initial pain may be the same as that of ectopic pregnancy, but the tenderness and localizing abdominal signs are found to effect the lower abdomen generally. While the pain may be more marked on one side than the other, both sides are usually affected. As a rule, muscle rigidity is not marked unless peritonitis develops. In ectopic pregnancy, or when a large quantity of blood is present in the abdomen, there is usually a marked general tenderness over the whole abdomen. In acute appendicitis the onset may be much the same as in ectopic pregnancy. The sudden-like acute pain, however, is usually centered about the umbilicus, while the localization of the pain is in the right ileac fossa. As usual, where obstruction of the viscus is eminent, the pain is cramp-like in nature and followed by nausea and vomiting. When the appendix lies over in the true pelvis, the differential diagnosis is very hard. The palpation of a mass per vagina, with elevation of temperature and leukocytosis, calls for an exploratory laparotomy because the treatment for either pelvic appendicitis or localized inflammatory conditions in the pelvis whether connected with tubal pregnancy or with inflamed tubes, is the same. The ovarian cyst, with twisted pedicle or with twist of the pedicle of uterine fibroids, the pain is sudden in the outset, agonizing in nature and followed by nausea and vomiting. The localizing signs are definite, that is the pain is located in the area of the twisted pedicle. Soon there appears, particularly in twisted cysts, a tumor, which gradually increases in size. The symptoms alone in all these conditions are not sufficient to a diagnosis. The history is of the greatest possible value. Pain, however, is the friend of both the patient path toward a correct diagnosis.

In conclusion, I wish to leave with you and the physician and is a guidepost on the two or three diagnostic helps: First, a higher degree of diagnoses will always be made by physicians who appreciate and squarely face their responsibility rather than seek to shift the burden to some one else. Second, there is not as yet a general acceptance of the fact that delay in making a diagnosis or failure in calling consultation as a means to early diagnosis, is the outstanding cause of the high death-rate. Third, there is need of having all attending physicians follow their cases to the operating room in order that they may profit by noting the end results of neglected pathology. Fourth, physicians must return to an appreciation of the fact that the practice of medicine in modern times means work. There is no profession requiring more constant, more strenuous, never ending labor than does ours and as one peeks through the rent in the curtain which shuts us from the future, one clear impression is received, namely, that we face an ever-widening responsibility, the necessity of an ever-broadening preparation and that we are headed for even more exacting labors than those which now engage our all too feeble efforts. Finally, the lowly appendix, having lost our respect through the faults usually associated with frank familiarity, must again be regarded with the austere circumspection, becoming such a murderer. Moreover, while the partisan in music may identify only the stirring strains of Yankee Doodle or Dixie, the physician seeking to interpret the discordant notes that constitute the potpourri of the acute abdomen must cultivate an ear for more than the wails of an inflamed appendix if he would often catch and properly label the many elusive maladies that here masquerade with such grotesque and baffling mimicries.

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PITUITARY HEADACHE*

W. J. CRANSTON, M.D.

Augusta

My perusal of the literature leads me to think there is a large group of physicians who believe there is no such entity as pituitary headache. That there is a condition, properly so designated, I am thoroughly convinced. Obviously, all headaches are not due to pituitary disturbance, but I believe many headaches, not purely pituitary in origin, have a large pituitary element in their production. A study of the anatomy and physiology of this gland would suggest its association with such headaches as we see in blood and spinal fluid pressure changes, mental stress, the various neuroses and eye strain.

Such eminent authorities as Cushing, Timme, Glassburg, Tilney, Tierney, Englebach and Towne have reported cases which they diagnosed pituitary headache and in many instances subsequent gland therapy proved the diagnosis to be correct.

While one is not disposed to follow blindly the lead of even such conservative and careful pioneers into the frontier of gland disturbance, we must disprove their contentions by the same critical laboratory and clinical observations which have characterized their work.

The pituitary body is a small, reddish gray mass lying in the sella tursica of the sphenoid bone and connected by a slender stalk to the tubercinerium. It is invested in an envelope of dura mater. The sella tursica gives it a bony wall anteriorly, posteriorly and inferiorly. This arrangement is important to keep in mind, because of many pressure symptoms which arise. Just anterior to the stalk and the tubercinerium, lies the optic chiasm. To either side of the pituitary body is the cavernous sinus, through which pass the sixth cranial nerve and internal carotid artery, while in its outer wall, the third, fourth and ophthalmic division of the fifth nerve pass. It is surrounded by the all important Circle of Willis, from which much of its blood supply comes.

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The pituitary body is divided into three parts, and anterior and posterior lobe and a pars intermedia. The anterior lobe is functionally a gland of internal secretion, while the posterior lobe and pars intermedia apparently have a somewhat different function. Cushing describes the pituitary body as a baseball grasped in a boxing glove. The anterior lobe is the boxing glove, the pars intermedia is the covering on the ball, while the posterior lobe is represented by the rest of the ball. The anterior lobe is supposed to secrete an active principle which controls boney growth, and regulates genital development. The posterior lobe is credited with maintaining blood pressure, stimulating metabolism, peristalsis and mammary secretion. It stimulates uterine contraction and urinary secretion and has lately been credited with increasing the absorption of spinal fluid. The pars intermedia is said to produce a diuretic hormone which is the basis of diabetes insipidus.

The problem, as I see it, is two-fold. First, can a disturbance of the pituitary gland produce the so-called pituitary headache. Second, is there anything else that will produce the same syndrome. To establish my hypothesis that there is a definite entity known as pituitary headache, it will be necessary to prove the first proposition, and disprove the second, otherwise my hypothesis falls to the ground.

The pituitary gland varies in size, from time to time, according to its physiological activity. This variation may be over long periods of time, as during the rapidly growing period of adolescence, or intermittently, as during menstruation, sexual excitement, following the ingestion of much carbohydrate food or under much mental or physical stress. The gland vessels become engorged with blood and the entire gland becomes much enlarged. Bearing in mind that the pituitary lies in a "miniature skull within the skull", as Walter Timme has aptly described the sella turcica, we can readily see that a disproportionately small sella turcica, being of unyielding bony structure, will limit the physiological hypertrophy of the gland and thereby limits its powers of secretion.

Occuring early in life, we see hypopitui-

tary defects as disproportionate growth, generally under growth; loss of normal carbohydrate control causing high sugar tolerance with adeposity, and absence of pituitary stimulation retarding genital development and secondary sex characteristics. In the psychic level, we find sluggishness, intellectually, morally and emotionally. Occuring later in life, after full bony growth has been achieved, it manifests itself as acromegaly, the clinical picture of which, being so familiar, requires no further comment. This is the more or less typical picture of hypopituitaryism, and is associated with headache of greater or less intensity. So that here we have the signs of pituitary disfunction associated with the symptom headache. Between this picture of grave disturbance on the one hand, and a normal pituitary on the other, lies that fairly large group of borderland cases with but a few signs and an unexplained headache.

It is a noteworthy fact, commented on by many clinicians, that the onset of most of these headaches is generally placed at, or about puberty, that they tend to become less severe after the menopause: that they are frequently associated with mental or physical fatigue, psychical sexual excitement, menstruation, and disappear entirely during pregnancy. This would suggest involvement of other glands than the pituitary, and a recognition of this fact explains many bizarre symptoms that it would be difficult to explain on any other basis. The pituitary does not, and cannot, act independently. After prolonged physical efforts resulting in exhaustion of the muscles, the adrenals become depleted and blood pressure falls. The pituitary and thyroid rally to the assistance of the adrenals, and by over acting, maintain the blood pressure and the blood sugar balance, provided the liver has not exhausted its supply of glycogen. If the capacity of the sella is adequate, the hypertrophy of the pituitary is accomplished without symptoms. Should the sella be small for its contained pituitary, pressure on the gland results, and manifests itself as headache.

Menstrual pituitary headache is apparently brought about by over stimulation of the thyroid in the following way. The work of Doisy, Allen, Novak, and others indicate

that at the end of the intermenstrual period, the secretion of the corpus luteum diminishes. The secretion acts as a check on the thyroid. When this check is withdrawn, the thyroid hypertrophies. The thyroid secretion, being a pituitary stimulous, causes this gland also to hypertrophy, and the headache develops, the result of pressure of the pituitary against its bony vault.

Now, as this process is repeated, day by day, week by week, and month by month, the obstructing clenoid processes of the sella turcica are gradually worn away, so that eventually the headache becomes less frequent and severe and finally disappears entirely, for the very simple reason that the obstruction is removed. This wearing away process is very similar to the erosion of the sternum and ribs that is so familiar to us in aneurisms of the thoracic aorta. It would naturally follow, that with the menopause, as the physiological hypertrophy of the pituitary ceased, the headaches would become less severe, and finally disappear altogether.

Where there is not only hypertrophy, but superimposed tumor, as the bony investment gives away, neighborhood pressure symptoms supervene, such as choked disc, partial or complete blindness, paralysis of the third, fourth, fifth or sixth nerve, together with signs of hypopituitarism.

Just why pressure on the hypophysis should cause pain, is not clear. Leak, Lovenhart, and Muehlberger, in 1927, reported work they had done on the cerebral blood vessels of dogs. They thought the nervous element in the cranial cavity responsible for pain lay along the blood vessels and not in the brain substance or meninges. They mentioned the rather well-known fact that after the dura is cut in brain surgery, the patient suffers but little pain. Further, they found that the dura and parenchyma of the brain could be cut without pain, provided the blood vessels were not cut or traumatised. Faradic stimulation of the pial vessels of anesthetised dogs caused augmentation of breathing, but not when the stimulous was applied to the meninges between blood vessels or to the brain substance. Since the brain is inclosed in an inelastic skull, any variation in its volume will cause tension on its connec-

tive tissue coverings and blood vessel walls within its cavity. Such tension may be sufficient to stimulate nerve endings along blood vessels in the cranium, and thus cause the sensation interpreted as headache. If their deductions are correct for the brain, then the same principles would obtain for the pituitary in its "little skull within the skull".

Whether or not this is the cause for intracranial pain, requires further study and proof, but at least it offers an interesting field for speculation that is far from being purely academic.

In studying the antecedents of these pituitary cases, there should be three dominant traits, namely, epilepsy, diabetes, and gigantism, because bony variations are distinctly hereditary traits. Observe the six fingered and six toed families and the families of giants reported in the current medical literature. While not always present, these family characteristics are more frequently present than absent in a carefully obtained family anamnesis. Furthermore, x-ray studies of these cases should show erosion of the clenoids, and post-mortem findings should show worn down clenoid processes with a disproportion between the size of the sella and the gland. These findings are of such common occurrence as to be generally accepted as a fact.

Of the cases reported, John A. Glassburg, in the New York Medical Journal of 1922, has perhaps the most classical. These two cases had previously had numerous operations about the head and trunk for relief of headache, but with disappointing results. Two patients were completely relieved after taking large doses of pituitary extract daily. When the treatment was interrupted, the headaches returned, only to be relieved again upon resumption of the gland therapy. Cushing reported several cases relieved by gland therapy. In a later address on the subject of endocrinology he modified his former views regarding gland therapy, and warned that we were headed for a fall if we pin too much faith on this method of treatment. In the many cases reported it is an interesting observation that the good results have been obtained by the oral administration of pituitary extract.

Several years ago a young woman of 19 years came to me complaining of headache which had persisted since the onset of menstruation at twelve years of age. During the intervening seven years she was rarely without a headache, although at times it was much worse. While menstruation was regular, it was scanty and painful. Physical examination was entirely negative. She was given six grains of pituitary extract daily. The headache gradually cleared up, and menstruation became free and painless.

Last summer a married woman, 36 years of age, was seen who complained of loss of energy, irregular menstruation and a constant bitemporal and frontal headache. Aside from a low blood pressure, the physical findings were negative. She was given 3 grains of whole gland pituitary extract a day. Within a month, the headache entirely disappeared, blood pressure readings became normal, and menstruation became regular after some two or three periods. Despite the sudden death of her husband, which necessitated a complete rearrangement of her domestic and financial affairs, the headache did not return. She had been a sufferer for several years.

The facts herewith presented warrant the belief that pituitary headache is assumed to exist. They warrant the further belief, that disturbances within the gland produce the sensation interpreted as headache. A question that will quite naturally occur to us all is whether there are any other causes that will operate to produce the same condition. This cannot be answered by a complete extirpation of the gland, for a total removal of the pituitary body is incompatible with life. It cannot be demonstrated through a study of the other glands of internal secretion, individually or collectively, because their action is so intimately interwoven into the pattern of the pituitary activity as to make it impossible, with our present knowledge, to say where one leaves off and another begins. Headache due to a disturbance in one or more of the glands of internal secretion would, of necessity, involve the pituitary.

Brain tumor in the neighborhood of the hypophysis would produce similar symptoms, but since these symptoms would be the result of pressure on organs so close to the

pituitary, the gland itself would be compressed. This would interfere with its normal function, and the syndrome of headache and hypopituitarism would become manifest. The pain would obviously be pituitary pressure pain, and while from another cause than a small sella turcica, would be a pituitary headache. Brain tumors situated elsewhere in the cranium could not produce the same results.

In *ticdouloureux* some of the symptoms appear but not the pluriglandular disturbance. In *migraine* we find a combination of signs and symptoms that are identical with pituitary headache. It is interesting that those cases of *migraine* which have been carefully studied have shown the more or less striking pituitary element and erosion of the *clenoid* processes has been fairly constantly shown.

It would seem then that there is a syndrome that might properly be characterized as pituitary headache. This statement is based on the accepted theory of a normal physiological variation in the size of the pituitary gland and the fixed size of its bony receptacle, resulting in pressure on the gland. Not only does the pressure cause pain, but it limits the activity of the gland, and in this manner involves other glands, which being linked up with the pituitary in a most remarkably complex system, interferes with their function and they in turn react on the pituitary, and a vicious cycle is established.

It is extremely difficult to prove that there are no other causes which will operate to produce the same condition, since we cannot remove the pituitary and still have the signs and symptoms just described. From a consideration of the facts brought out in this study we should think in terms of the pituitary when dealing with obscure headaches associated with pluriglandular disturbances, and we would be justified in making the therapeutic test with pituitary gland administration.

Curtice Rosser, Dallas, Texas (*Jour. A. M. A.*, May 23, 1931), has seen twenty-four persons in the past five years whose rectal complaint dated from the injection of solutions of phenol in oil into hemorrhoidal plexuses or under the rectal mucosa. He believes that partial occlusion and rigidity of the lower part of the rectum is present in many individuals who have received phenol-oil injections.

OBSTETRICS IN THE HOME*

C. K. SHARP, M.D.

Arlington

Until community or county hospitals are universally established, which seems not probable in the immediate future but a certainty in the more remote future, a large percentage of our rural and small town maternity cases will of necessity have to be conducted in the home. Of these there are some ideal homes with all conveniences and sanitary devices so desirable for the safe delivery and after-care of the parturient. There are other homes grading from this ideal down to the lowliest hovel, veritable hot-beds for infections of the most virulent nature. But with a proper technique even cases in such unfavorable surroundings do uniformly well with a minimum of morbidity.

There are two general propositions which should concern all conscientious obstetricians or any one accepting maternity cases: First, the painstaking care of the pregnant woman throughout the period of gestation, that she may come into labor in the best physical condition possible, and second, that her labors be conducted under a technique of proved value. For what have we gained, though we have been ever so circumspect in prenatal care, if at confinement we employ a slovenly technique which might be the direct cause of an infection liable to destroy the patient? Can there be any greater mental torture to us who deal in obstetrics than to have a patient with puerperal infection confront us, and to check up and realize that our methods of conducting the delivery were faulty? So, it behooves us all, for conveniences sake, for the sake of our own reputations and for the sake of the woman herself to accomplish a technique, and never fail to employ it, by which we may reasonably assure ourselves that we are not culpable in case an infection supervenes.

In the prenatal care of the prospective mother we must first of all educate her to the necessity of placing herself in our care early in the pregnancy. How disconcerting it is to

have thrust upon us a patient at or near term with preeclamptic symptoms, or a primipara with a maternal dystocia or a patient with advanced active tuberculosis or a heart or kidney lesion in which pregnancy should have been interrupted.

Every pregnant woman who places herself under our care must have a thorough physical examination at the onset. The lungs, heart, teeth, sinuses, abdominal organs and kidneys and the blood pressure noted. Any foci of infection must be eliminated early. We must see that the kidneys and all the emunctories are functioning properly throughout the pregnancy.

Albuminuria we do not like to encounter for it makes us feel ill at ease, but this is of secondary importance to a persistent hypertension. Watch the blood pressure throughout the pregnancy; any reading of a systolic pressure of 140 or over should be considered pathological and an earnest inquiry should be made as to its cause. We may have a high blood pressure without albuminuria; this probably explains some of the unexpected eclampsias we formerly had to deal with. In all primiparas and those patients with a history of difficult or instrumental deliveries, at least external pelvimetry should be practiced and all abnormalities recorded, and should a pelvis be frankly deformed, precluding the possibility of the birth of a full term child per via naturalis, we are forewarned and may adopt the best measures to meet the individual case, whether it be the induction of a premature labor or a Caesarean section.

In former years we were taught to allow the parturient to eat anything and everything in any quantity; this we know now was erroneous. She should be advised to partake of a well balanced ration if she is in normal good health but not gorge herself as many of them are prone to do and good advice to give them is to leave the table somewhat hungry. Physical exercise should be encouraged; aside from the usual household duties, daily walks over smooth surfaces should be taken: long auto rides must not be indulged in. We have seen several cases of miscarriage caused by long auto rides over rough roads; probably the rough roads had more to do with it

*Read before the Chattahoochee Valley Medical and Surgical Association, Albany, Ga., July 9, 1930.

than the auto. The auto is a poor substitute for a good walk.

Aboriginal women, who lived close to nature, tradition tells us, underwent labors which were easy and remarkably free from complications even to the extent that they could leave the line of march, give birth to their children, and then overtake the tribe. How true this is there is no way to ascertain, but with their healthy, strong bodies incident to leading simple, wholesome lives, it sounds reasonable. How different are the civilized women of today, leading lives of comparative luxury with all its attendant dangers. There is a growing demand for the quickest and easiest way out of their travail often to their own detriment and that of their offspring.

There should be no difference in the principles of obstetrics in the home and in institutions. The difference lies in the lack of convenience and means to meet emergencies in the former and the constant presence in the latter of all these facilities, with trained help when help is sorely needed. It is seldom that I have had a trained assistant in instrumental cases in the home. Usually the anesthetic is given by myself to the surgical extent and then placed in the hands of a bystander to continue under careful instruction; this becomes necessary when one is far from another physician and an emergency must be met. In rural districts there is entirely too much help of such as it is. All the neighbors, and their dogs thrown in for good measure, just sit around to see what they can see and hear what they can hear, laying up a store for neighborhood gossip. The physician is always remembered in their criticisms; so it is a good idea to clear all undesirables out with positiveness and gentility.

I want to refer briefly to the indispensable minimum in technique in the average run of normal labor cases. Lack of time prevents the mention of instrumental or manual delivery or surgery. These matters are known to all of us, but the question is whether we take pains to practice them conscientiously and my plea here is that we do so in every instance without fail. We might say what is the use to carry out an aseptic technique

in a dirty hovel. I contend that such surroundings make it all the more necessary.

On arrival at the bedside of a patient in labor see that the rectum is well evacuated by enema if necessary. This is of extreme importance and a procedure we are apt to neglect. How very unpleasant to have the field soiled with fecal matter and besides, such an accident is attendant with more or less danger from infection. Should it happen, however, the field should be sponged by carrying the sponging material backward each time and the parts cleansed with an antiseptic solution. The next item is to palpate the abdomen for position of the child or children; note any obliquity of the uterus if present; locate the fetal heart sounds and note whether or not the heart sounds are heard in different localities, indicating more than one fetus. The doctor's hands and arms should be well scrubbed with tincture of green soap. Do this thoroughly. If you have no green soap, any soap will do. I can testify to the cleansing qualities of common home-made lye soap.

The patient's vulva is now shaved with a sharp, hoe-shaped safety razor, the patient being across the bed. This is the duty of the trained nurse when we are so fortunate as to be allowed one, but this refinement is usually denied us, so we are compelled to do it ourselves. Aunt Creecy or Aunt Jane would be poor dependence for such a procedure and, besides, she does not believe in "no such." After shaving the vulva and surroundings they are treated with a thorough application of soap and water, then with some suitable antiseptic, and finally by the application of a good antiseptic, my favorite being two per cent mercurochrome, some of which is injected into the vagina.

Now, with the hand encased in a previously boiled rubber glove, the digital examination is made. It is safer not to make an examination at all if the vagina has not been properly prepared and the hand not protected by a sterile glove, one or both. This is one reason why our midwives have such favorable results: they uniformly do not make examinations, and it is our duty whenever an opportunity presents itself to advise them never to do so. If caught in an emergency

with no material with us to produce asepsis, it is wise never to attempt a digital examination; it is better to trust to luck and Dame Nature, who rarely ever makes a mistake. Personally, I can not get any information from a rectal examination and, besides, a woman with hemorrhoids will strenuously object, as many of them are possessed of these.

After all, the main object of an examination is to ascertain if the woman is in labor and the stage of dilatation of the cervix. It is not so important at this stage to know whether or not we have an occipito posterior presentation, for a vast majority of these cases will rotate forward; a breech will come through all right, but a transverse, easily diagnosed, needs our immediate attention and the sooner the better. Another reason why midwives get by with their work is the fact that they wait during an occipito posterior presentation, of course not knowing why the labor is delayed, and experience has taught them that waiting and not interfering is the proper thing to do. Could they become versed in the administration of narcotics in this condition much exhaustion could be avoided and suffering diminished. If we are not willing to adopt a "watchful waiting" attitude in these cases, we should not accept them, and in occipito posterior presentations more harm is done to mother and child by hurry-up measures than any other one condition met with. The most culpable error we make in these cases is to administer pituitrin. Instead, give them morphine and rest the tired uterus as well as the tired mother. The position of the mother may help rotation; let her lie on the side opposite the obliquity. I can't remember when I have had a case of uterine exhaustion. The judicious use of morphine, sometimes combined with scopolamine, has served me well and has made many a prolonged labor bearable for the patient. Scopolamine produces an amnesia and the memory of pain is abolished. Try and not give morphine a short while before the baby is born for the sake of the baby. To me, it is a difficult matter to diagnose an occipito posterior presentation without feeling an ear.

Frequent examinations are unnecessary and dangerous, even with rubber gloves on the hands. We may know how the case is pro-

gressing by the type of contractions and the attitude of the mother. We may know when the presenting part is reaching the outlet by pressure of the fingers over the integument surrounding the vulva. "Keep fingers out of the vagina" is a slogan we all should remember and practice. A sterilizer carried with us is a convenience in the country; one with an alcohol burner is quick and satisfactory in the absence of electricity, but a dish pan or frying pan will answer in an emergency. Suitable hand basins are rarely found in the home. It is wise to carry these with us. All the instruments usually used in the conduct of labor should be in our bags, the six most important ones, in my estimation, being boilable rubber gloves, obstetrical forceps, a set of assorted sized Voorhees bags, a good new rubber catheter, Snellie scissors, large and small hypodermic syringes, and needles with open lumens.

Chloroform continues to be my favorite anesthetic; I have never seen the slightest accident from its use. The Gwathmey method seems to be growing in popularity and intravenous amytal promises much, but I am waiting for their general acceptance by the medical profession before attempting to use them. Ether is rather slow for general use and is dangerous in the presence of an open fire. Eclampsia cases are becoming exceedingly rare, due doubtless to the prenatal observation of patients and the early correction of conditions that would lead to it.

The post partum care of the mother and baby should receive our most careful attention. Insist on the sick room being kept as clean as possible with plenty of circulating air, and the avoidance of the time-honored custom of keeping the room dark. A clean bed is imperatively necessary at all times. We must not neglect the care of the nipples and the baby's buccal cavity. The heavy breasts should be supported by proper means. Dr. DuBuy's adhesive support is very comfortable, but not suitable for hot weather. We are prone to neglect post partum care, leaving this to an untutored negro nurse who has no conception as to what asepsis means. The perineal toilet is most important; insist that no one touch the parts with the hands. When a cleansing bath is necessary, place a douche

pan under the hips and pour the solution over the parts into the pan.

There is but one way to prevent lacerations that I am aware of and that is to cut the perineum with scissors at the proper time; a smooth cut is easier to repair and will heal more promptly than a jagged tear. It is done painlessly by pushing the anesthetic to the surgical extent as the presenting part is pressing against the perineum.

A word as to midwives: They are blessings to the busy doctor in this particular territory with such a large negro population, with a birth-rate of approximately two to one. We should instruct them whenever an opportunity presents itself in what not to do; they can remember this. It is comparatively rare that I am called to a negro in labor and usually when called it is at the solicitation of a midwife and often I find most interesting situations. Recently I was called by a midwife, informing me that the child's arm was born and the rest would not come. Just as I arrived, spontaneous version was taking place and was completed in a few minutes; the edematous arm and everything indicated that her diagnosis was correct and proved to me that spontaneous version at term was not a myth.

In the past thirty-two years I have experienced practically everything in the domain of obstetrics, and I have never seen two cases exactly alike. I have dreaded every case I have entered into, but have found this branch of medicine exceedingly interesting, with all its drawbacks, and am glad that I have lived to see the day when obstetrics is coming into its own. Among the interesting conditions I have observed are a case of exencephalic monster, a spontaneous version at term, a placenta previa marginalis with twins, a hydrocephalic child with club foot and the whole section of the lumbar spine missing, and several centrally implanted placenta previas. One fetus had luxation of both knee joints which afterwards resumed normal relations and the legs functioned normally. I have seen a fetus weighing fifteen pounds without the brains after craniotomy. In another case an impacted transverse presentation necessitated eviceration and division of the fetal body.

One child, who weighed fifteen pounds,

was with great difficulty delivered alive, with forceps, and, as a result of injury to the brain, it never walked, talked or made a voluntary movement, and died at the age of 12 in convulsions. This was a beautiful case for Caesarean section, the mother having borne many children previously. She had gone about six weeks beyond the normal period of gestation. Another most interesting case was a multipara with a badly decompensated heart with general edema and dyspnoea in the extreme. On the afternoon I first saw her she was not in labor, but I was called to see her on account of the distressing symptoms from her heart. She was unable to lie flat in bed and her breathing was distressing. Emergency treatment was prescribed and plans laid for taking her to a hospital the next morning for treatment, possibly to do a Caesarean section under local anesthesia. She lived twelve miles from my office. That night she delivered herself of twins in less than thirty minutes after the onset of pains. The midwife who was in attendance said, "She delivered in three pains." There were no bad after-effects and under digitalis and prolonged rest in bed she resumed her usual health.

I want to mention another case that was not connected with labor, but, while making a routine microscopic examination of a specimen of urine from a pregnant woman, a live itch parasite swam across the microscopic field. This probably has never happened before nor will it ever happen again. For thirty years I have tried to find such a hideous looking monster in the burrows of scabies and have failed. Now I have seen it and am convinced of the fact that there is such an animal.

I have probably officiated at the birth of a regiment of babies in the past thirty-two years, and, with the experience I have had, if I had my professional life to live over again I do not think I would accept obstetrical cases. This branch of the profession contributes more to the wear and tear on the physician than any other.

The United States Civil Service Commission will accept applications for Medical Officer, Associate Medical Officer, and Assistant Medical Officer in General Surgery and Medicine at its office in Washington, D. C., until June 30, 1931.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Association of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

JUNE, 1931

GREETINGS

The best meeting of the Medical Association of Georgia is now in history. Seven hundred and eleven doctors registered and all attended part of the deliberations and most of them heard practically all of the splendid program. The subjects were well studied and presented.

The social functions were wonderful and of the highest type. Too much credit cannot be given to the Woman's Auxiliary to Fulton County Medical Society, and to the committees of the local medical organization.

Governor Hardman did a most gracious thing in presenting a loving cup, to be sought each year by some live, intelligent doctor for special achievement. This will stimulate research and work.

The presence of the President of the A. M. A., Dr. Wm. G. Morgan, of Washington, D. C., was quite a compliment. His ingratiating manner appealed to all who met him, and nearly all present had that pleasure. To meet him was to love and respect him. He enjoyed his visit almost as much as we enjoyed his presence and his message. He made it plain that the A. M. A. is not fighting prohibition of beverage alcohol, but is fighting for a physician to have the right to practice medicine unhampered by the laity and to use what he is taught and has learned from experience to be of value in the treatment of disease.

The address by Doctor Rosser was an eye-opener. His subject, *The Underworld in Medicine*, was timely and if we were willing to make the sacrifice we, in Georgia, might succeed as well as they did in Texas.

The present attitude here being to sell your profession by service, we believe, will win as effectively as seeking legislation.

The Abner Welborn Calhoun lecture was a masterpiece and well worth the time spent

at the entire meeting. Dr. J. B. Herrick, of Chicago, presented his subject well and every one was at attention during the delivery of his message.

To my mind, the endowment of this fund should be increased to the point that it will easily take care of all expenses of a distinguished guest. A few dollars each year, given by each member of our Association, will soon furnish the amount necessary. Everybody kick in and let's put it over. All committees have been appointed. The President appoints but few, as most of them are provided for in other ways. Our appointments have been made without any desire to favor friends, but with the sole object of providing our Association with officers who will do things for the best interests of all concerned.

Two matters of a business nature, appeals for fair play only, are to be asked of our Legislature. One, the change in our com-

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.

pensation law, restricting the total to be paid to hospital and physician, so that proper attention and care can be given and to exceed the limit of \$100.00 where found necessary. There are cases where physicians have even been called on to bear part of the hospital care of some of these compensation cases. It is true a large majority of these cases can be easily cared for under the present law, but why not make it elastic enough to cover all cases as it is intended to do. Be it said to the credit of quite a few companies carrying this type of insurance that they will waive this provision when the matter is presented to them. The change will not affect them.

The other matter is that of protecting hospitals and physicians against imposition on the part of those injured, principally on the public highway. Many are brought to hospitals, cared for and treated and not a cent can be secured to cover this expense.

No man should be allowed to drive an automobile on our public highways who is not protected by some type of insurance.

Think over these matters and see your representative and senator and explain to him the whys and wherefores. Why should the burden in these cases fall on the physician and hospital?

Think and act now.

A. G. FORT, M. D., *President.*

CLINICS AND STATE MEDICINE

A Note to the Eye, Ear, Nose, and Throat Men in Georgia:

There is a clinic for treatment of Trachoma at Bainbridge, Ga., for Decatur and Mitchell Counties. This is under the auspices of the health officers of these counties, assisted by the State Board of Health and the U. S. Public Health Service, with the local specialist assisting. Another unit is likely to be opened at Eastman, Ga. There must be some fire where we have so much smoke. What do you want to do about it? Shall we organize these clinics and have our own men handle them or shall we hands off and turn it over to the health officers?

Either organize and run these clinics, if they are necessary, or quit finding fault with State Medicine.

A. G. FORT, M. D., *President.*

ESSENTIALS OF AN APPROVED DEPARTMENT OF RADIOLOGY OR ROENTGENOLOGY (Abstract)

Prepared by the Council on Medical Education and Hospitals of the American Medical Association

Definitions

Radiology.—The branch of medicine which deals with the diagnostic and therapeutic application of radiant energy, including roentgen rays, radium, ultraviolet rays and other spectral radiation.

Department of Radiology.—The department of a hospital, clinic or other institution, organized and equipped for the diagnostic and therapeutic application of radiant energy, including roentgen rays, radium, ultraviolet rays and other spectral radiations.

Radiologist.—A qualified physician who

also has obtained adequate special training and experience in general radiology.

Roentgenology.—The phase of radiology which deals with the diagnostic and therapeutic application of roentgen rays only.

Department of Roentgenology.—The department of a hospital, clinic or other institution organized and equipped for the diagnostic and therapeutic application of roentgen rays only. A department organized and equipped solely for the diagnostic or therapeutic application of roentgen rays shall be known as a department of diagnostic or therapeutic roentgenology, respectively.

Roentgenologist.—A qualified physician who has had adequate training and experience in the diagnostic and therapeutic application of roentgen rays.

Radium Specialist.—A radiologist who specializes in the therapeutic use of radium.

Private Radiologic Laboratories.—The principles herein which refer to a hospital department of radiology should be construed as applying with equal force to a private laboratory of radiology.

Personnel

Director.—The director shall be a graduate of a medical school that is approved by the Council on Medical Education and Hospitals and shall be licensed to practice medicine in the state in which his department is located. He shall also have had special training, such as is approved by the Council, in radiology or roentgenology at an acceptable school—preceptorship, hospital or clinic, department of radiology or roentgenology—for a period of at least three years, or, in lieu of such training, shall have had a minimum of five years' experience in the exclusive practice of radiology or roentgenology. He must be a man of good standing in the medical profession, and particularly among those specializing in radiology. The director shall either be on a full-time basis or have definite hours of attendance at the department, such hours to be ample to insure the element of medical consultation in every examination or treatment.

The director shall have complete charge of the department, with responsibility for all examinations and treatments. He shall also be responsible for the employment of all professional assistants, and for the efficient maintenance of the department.

Scope

A department of radiology should be able to render all of the following services:

(a) Roentgenography, simple or stereoscopic, of any part of the body, with medical interpretation of the roentgenographic ob-

servations, and under satisfactory conditions for the protection of the patient and of the professional and technical personnel.

(b) Roentgenoscopy of any part of the body, in any position, with or without opaque mediums, with medical interpretation of the roentgenoscopic observations, and under satisfactory conditions for the protection of the patient and the professional and technical personnel.

(c) Roentgenotherapy of all benign and malignant diseases amenable to such treatment with roentgen rays generated at low, moderate or high voltage (long, medium or short wave length), as the conditions may require, and under satisfactory conditions for the protection of the patient and of the professional and technical personnel.

(d) Radium therapy of all benign and malignant diseases amenable to such treatment with an adequate quantity of radium element or emanation, and under satisfactory conditions for the protection of the patient and of the professional and technical personnel.

Ultraviolet therapy, general or local, with satisfactory air-cooled and water-cooled quartz mercury lamps or carbon arc lamps, with suitable quartz and other applicators for irradiation of cavities, sinuses, or the superficial lesions under pressure, and under satisfactory conditions for the protection of the patient and of the professional or technical personnel. This stipulation is not mandatory, but the Council recommends that every department of radiology be equipped for ultraviolet therapy or that the ultraviolet equipment of hospitals be placed in the department of radiology. Ultraviolet treatment by the department of physical therapy, shall not be countenanced unless such department is under the control and supervision of a medical director who has specialized in radiology.

Records

Full records of all examinations and treatments made by the department, suitably indexed, are essential. Roentgenograms made in the department should have inerasible identification marks, which will preclude error as to patients concerned. Roentgenograms may be lent to referring physicians, but should be returned to the laboratory for filing and future reference. Suitable storage facilities should be provided where roentgenograms and other records will be both safe and readily available for reference. They shall be kept as long as there is the possibility of their being needed for the benefit of the patients or their physicians.

As reontgenography constitutes only a

kind of medical examination, on which the reontgenologist's opinion of the patient's condition is partly or wholly based, and as the opinion of the specialist is the essential factor, the Council holds that the introduction of roentgenograms as evidence in medicolegal cases should be discouraged as immaterial and as tending to adulterate the process of justice. There is no more reason for the introduction of roentgenograms than for requiring a pathologist to bring to court his microscope and his sections of tissues.

Reports

The reports of an approved department of radiology or roentgenology shall be made through the director on stationery or blanks having the name of the director printed thereon. *Under no circumstances shall roentgenologic diagnosis, interpretations, opinions, statements of prognosis, or therapeutic suggestions be offered by the nonmedical personnel.*

Ethics, Fees and Publicity

Radiology is a special type of *medical practice*, and the physician practicing radiology is subject to the same rules of special training and conduct that govern his fellow specialists in the practice of medicine and surgery. The Principles of Medical Ethics of the American Medical Association shall apply in all cases. The fees charged for radiologic services shall be under the control of the director of the department. All systems of rebates, discounts, special group rates, etc., shall be considered unethical, except that, where the patients' economical status is the determining factor, the radiologist, like his fellow physician in medicine or surgery, may waive part or all of the fee.

Admission to the Approved List

Only those departments of radiology or roentgenology in which the personnel, space, equipment, management, finances and records are such as will insure honest, efficient and accurate work may expect to be listed as approved. Any department of radiology or roentgenology desiring to be placed on the approved list should apply to the Council on Medical Education and Hospitals of the American Medical Association, 535 North Dearborn Street, Chicago.

INTERVERTEBRAL DISK

Emil S. Geist, Minneapolis (*Jour. A. M. A.*, May 16, 1931), demonstrates in the light of Schmorl's work, the anatomy, physiology and pathology of the intervertebral disk and calls attention to clinical deductions drawn therefrom in the recent literature as well as from clinical experience. He believes that this is of importance to the orthopedic surgeon, the compensation adjuster, and the roentgenologist.

OFFICERS AND COMMITTEES OF THE ASSOCIATION

1931-1932

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 Alternate, Wm. A. Mulherin, Augusta.
 E. C. Thrash, Atlanta (1931-2).
 Alternate, C. W. Roberts, Atlanta.
 O. H. Weaver, Macon (1932-3).
 Alternate, C. K. Sharp.

COUNCIL

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 M. M. McCord, Rome, Clerk.

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2. J. A. Redfearn, Albany (1933).
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5. E. C. Thrash, Atlanta (1934).
6. K. S. Hunt, Griffin (1934).
7. M. M. McCord, Rome (1934).
8. H. M. Fullilove, Athens (1934).
9. C. L. Ayers, Toccoa (1932).
10. S. J. Lewis, Augusta (1932).
11. A. S. M. Coleman, Douglas (1932).
12. J. Cox Wall, Eastman (1932).

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1. C. Thompson, Millen (1933).
2. R. F. Wheat, Bainbridge (1933).
3. Chas. A. Greer, Oglethorpe (1933).
4. W. H. Clark LaGrange (1933).
5. W. A. Selman, Atlanta (1934).
- 6.
7. W. H. Perkinson, Marietta (1934).
8. M. A. Hubert, Athens (1934).
9. J. K. Burns, Jr., Gainesville (1932).
10. H. D. Allen, Jr., Milledgeville (1932).
11. K. McCullough, Waycross (1932).
12. J. W. Edmondson, Dublin (1932).

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 J. W. Palmer, Ailey (1932).
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 T. F. Abercrombie, Atlanta, Commissioner of Health,
 State of Georgia.

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 Wm. A. Mulherin, Augusta (1934).
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HOSPITALS

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 Grady N. Coker, Canton, Secretary (1932).

K. McCullough, Waycross (1934).
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 Arthur D. Little, Thomasville (1936).

ABNER WELLBORN CALHOUN LECTURESHIP

James E. Paullin, Atlanta, Chairman (1933).
 H. I. Reynolds, Athens (1934).
 Eugene E. Murphey, Augusta (1935).
 Craig Barrow, Savannah (1936).
 Frank K. Boland, Atlanta (1932).

NECROLOGY

A. J. Mooney, Chairman, Statesboro.
 J. M. Smith, Valdosta.
 J. T. McCall, Rome.

HISTORY OF MEDICINE IN GEORGIA

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 Jas. J. Clark, Atlanta.

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B. H. Minchew, Chairman, Waycross.
 Marion T. Benson, Atlanta.
 W. E. McCurry, Hartwell.
 Ralston Lattimore, Savannah.
 Paul L. Holliday, Athens.

FRATERNAL DELEGATES TO OTHER STATE MEETINGS

To visit Alabama: John M. Poer, West Point;
 C. W. Strickler, Atlanta.
 To visit Florida: J. R. Jordan, Ellaville; I. W.
 Irvin, Albany.
 To visit North Carolina: J. K. Burns, Gaines-
 ville; Frank Eskridge, Atlanta.
 To visit South Carolina: Hal M. Davison, Atlanta;
 H. J. Rosenberg, Atlanta.
 To visit Tennessee: A. R. Rozar, Macon; Geo. B.
 Smith, Rome.

The eighty-third annual session of the Medical Association of Georgia will be held at Savannah, May 10, 11, 12, 13, 1932.

GEORGIA STATE NURSES ASSOCIATION

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Tenth—Mrs. Joseph Akerman, R. N., Augusta.

Headquarters

131 Forrest Avenue, N. E., Atlanta.

DISTRIBUTION OF NURSING SERVICE

To plan for the exigency of an under-supply of efficient nursing care to the public and for the oversupply of nurses—both due to the inequalities of organization—are the objectives of the Joint Committee on the Distribution of Nursing Service.

This committee, representing the three national nursing organizations—the American Nurses' Association, the National League of Nursing Education, and the National Organization for Public Health Nursing—came into being prior to 1930 and was re-organized last year to study the problems of distribution of nursing service.

Mrs. Anne L. Hansen, director of the Visiting Nurse Association of Buffalo, N. Y., is chairman of the committee, which numbers twenty-five. Through committees appointed by the State Nurses' Associations this committee will direct its effort, and it is notable that the interest and cooperation of a majority of the State associations have already been challenged. A number of the States have combined the Registry Committee with the Committee on the Distribution of Nursing Service. Others have put representation of the Registry Committee with that of the Distribution Committee, while still others are now in process of forming committees for this important work.

The objectives of the committee are (1) the development of standards of hourly and general staff nursing and (2) the organization of councils to study the needs of communities for nursing service.

Three sub-committees are studying (a) group and graduate staff nursing in hospitals, (b) hourly nursing, and (c) community council organization.

So much for the "machinery" of the Joint Committee on the Distribution of Nursing Service.

Graduate Staff Nursing Service

That hospitals have been measuring their nursing needs rather than the community's need for graduate nurses has become definitely known, and the oversupply of graduates being turned out by schools of nursing is one of the determining factors in reorganization to include graduate staff nursing service.

Hospitals conducting training schools have apparently not taken into consideration either the future of nursing service or the future of their own graduates, but have blindly followed the prevailing practice of accepting students for the nursing staff, feeling that it was the economical thing to do.

According to statistics gathered, students have been carrying some 64 per cent of the nursing load in hospitals, while graduate floor nurses have carried but 7.0 per cent, the balance of staff service being assumed by orderlies, attendants, maids, and aids.

The increase in the student group from 1910 to 1927 was 138.2 per cent, while the increase in hospital beds for the same period was 102.6. And the ratio has probably increased since that time, continuing an already "unhealthy" situation in nursing.

But aside from this, there are a number of contributing reasons for adoption of graduate staff nursing service. In many communities an eight-hour day for student nurses has been adopted, reducing the number of nursing hours per day which can be expected from the staff, and the opening of hundreds of clinics in connection with hospitals within the past few years has made ever-increasing demands on the nursing staff.

New departments, including x-ray, physiotherapy, basal metabolism, etc., have been added. Nurses assigned to these units have reduced the number to give bedside care to patients. Physicians have increasingly delegated procedures to nurses. Hospital procedure, with the advance of medicine, has

been elaborated and made more complex; consequently, though the size of the student body has been increasing steadily, it has not been sufficient to meet the demands of the hospital nursing service and these accessories to medical practice.

The employment of graduate nurses has relieved the strain of this situation, providing as it does a flexible nursing staff which does not need to consider educational objectives. In fact, where hospitals afford both a school and graduate nursing service, there has been a tendency to reduce the size of the school when a system of general graduate nursing is once in operation. Opportunities for education of both student and graduate increase with this combined type of service, and nursing care of the sick is enhanced.

Graduate staff nursing service has now been in effect in many hospitals throughout the country for some time, and no longer can it be said that it is an "expensive experiment". On the other hand, hospitals operating with such service are enthusiastic about it, and the superintendents of many of them, now entirely dependent upon student service, say they are looking forward to the time when nursing in their own institutions will be done at least in part by graduates. These same superintendents say they are confident graduate service will be as economical as student service, and infinitely more satisfactory, taking into consideration full assumption of responsibility for a well-conducted training school. That experimentation with student personnel through necessary preliminary classes is an expensive procedure for the hospital, eliminated through adoption of graduate service, as is also classroom instruction; and that patients who have been nursed both by graduate and student service, prefer graduate service.

What Is Hourly Appointment Nursing?

Hourly appointment nursing, though available in some communities for a long while, is perhaps a much misunderstood term even among nurses, and the following definition, which comes from the Joint Committee on the Distribution of Nursing Service, is timely: Hourly appointment nursing is intermittent nursing service given to those individuals needing graduate nursing care, including patients in their homes, doctors in their offices, etc. It is furnished at a stated time and is sold on a time basis rather than on a visit basis, which facts particularly differentiate it from what we ordinarily speak of as visiting nursing. There must be two fundamental characteristics of an hourly appointment nursing project: (1) to serve the public economically, efficiently, and in terms

of needs not now being met adequately; (2) there must be a perpetually experimental attitude towards the work, so that it may be kept at all times abreast of current needs.

The public knows the value of skilled nursing care and should have it, at reasonable cost. The entire time of a graduate nurse is not always required, yet until hourly nursing arose to meet the situation, the public either paid for full-time service in order to get highly trained and specialized care, or accepted a substitute. All serious illnesses, many minor illnesses, and much chronic illness needs skilled nursing, and it is known there is a serious lack of such nursing in homes.

A few nurses in numerous communities have individually experimented with hourly nursing, and while it has been successful from the patient's point of view and from the technical and professional angle, it has not been successful from the nurse's angle—meaning economic. Experience, always dear, has proven that hourly nursing must be sponsored by a high-type organization which employs the nurse on salaried basis. Well-trained nurses must be selected for this service from the very outset. Financial backing as well as the confidence of the community is necessary.

Hourly nursing, therefore, must be properly backed, must be standardized, and must be popularized—advertised. This service is a boon to a large group of moderately well-to-do people—salaried people.

Inauguration of the plan will vary in communities, according to the available "machinery" at hand through which this service can operate. In some communities it might mean that the District Nurses' Association or the Official Registry, or both, will develop it. In others, the public health nursing organization, the visiting nurse association, or some community organization which will make itself responsible will foster the movement. The hospital, especially in the smaller cities or less populated areas, could develop hourly appointment nursing. Or it can be promoted on the basis of joint participation by all groups interested. In any case, the understanding and cooperation of the medical profession should be secured.

Georgia Has a Committee on Nurse Distribution

An inclusive committee, comprising leadership in all types of nursing service, has been created by the presidents of our three State nursing organizations, and will work in cooperation with the National Committee for a much-needed and better distribution of nursing service in Georgia.

C A N C E R*

Chapter I

J. L. CAMPBELL†, M. D.

Atlanta

The Cancer Commission of the Medical Association of Georgia was created at Savannah in the spring of 1917. During the fourteen years of its existence the Commission has endeavored to give to the public and to the medical profession of the State all of the information obtainable in regard to the advances made in the study, diagnosis, and treatment of cancer.

Previous to 1917, little or no effort had been made to educate the people in public health problems. Nothing was known by the public about the nature of cancer except the information gained from the flaring advertisements of quack doctors who pictured all "eating sores" as cancer, to be cured only by the special treatment just discovered or developed by Dr. ———, who had secured his information from the last surviving "medicine man" of the ——— tribe of Indians. In reality, the "cure" consisted of some arsenical or antimony paste as ancient as the Ten Commandments, for nearly all of them were originated in Egypt 3,500 years ago.

Dr. J. W. Palmer was elected President of the Medical Association at the 1917 meeting and made haste to appoint the newly authorized Cancer Commission and to urge upon it the importance of the duties outlined. This was a Herculean task, for no money has been provided; in fact, the Association had none, as many of its members were in the army.

The Commission was fortunate in securing the aid of Dr. Frederick L. Hoffman and Dr. Francis Carter Wood, who came to Atlanta the following spring and inaugurated the first educational campaign put on in the South. These gentlemen were well received and their work given wide publicity by the press of Atlanta and the State. In fact, the

daily and weekly papers, the religious and other periodicals, have always been active in helping with all of our education propaganda for the control of cancer. As a result, hundreds of people at the present time are familiar with the early symptoms and signs of cancer, and seek the aid of well trained doctors before the disease has progressed beyond the curable stage.

Our State is fortunate in having several well equipped centers where adequate diagnostic facilities are at hand and where the latest methods of treatment are available. It is not necessary for one to seek the services of some far-away doctor; Georgia has within her borders men who can give any worthwhile treatment known to the medical profession of the world.

During the lifetime of the Cancer Commission many valuable discoveries have been made, and today cancer is no longer the great mysterious entity that it was formerly thought to be. Now, we know just what it is: we know that it is purely local in its early stages and can be cured when properly treated. Nevertheless, we are compelled to recognize it as a unique disease—not influenced by any of the preventive measures which inhibit the spread of epidemic, contagious, or infectious diseases. The upbuilding of the bodily health, social or economic conditions do not influence its progress or prevent its development. It is no respecter of persons and, if left alone, always ends in death. Only education and prompt co-operation between doctor and patient can control its ravages. *Remember, early cancer is curable!*

NERVOUS SYMPTOMS AS EARLIEST MANIFESTATIONS OF CARCINOMA OF PANCREAS

Joseph C. Yaskin, Philadelphia (*Jour. A. M. A.*, May 16, 1931), observed depression, with crying spells, anxiety, insomnia, anorexia, loss of weight, and weakness without feeling of unreality and other disturbances of perception, memory and judgment in four instances of carcinoma of the pancreas in previously healthy persons. These symptoms antedated any definite gastro-intestinal symptoms and objective observations by from three to eight months. No explanation is offered for the occurrence of these phenomena. The relation between visceral changes and abnormal emotional states is referred to.

*This is the first of a series of seven articles on the Cancer Problem in Its Relation to Public Health written by Doctor Campbell at the request of the Georgia State Board of Health. Succeeding articles will be published in the Journal until the series has been completed.

†Chairman of the Cancer Commission of the Medical Association of Georgia.

URINARY TRACT PATHOLOGY IN CHILDREN

EARL FLOYD, M. D.

J. L. PITTMAN, M. D.

Atlanta

Urinary diseases among children have been until recently a frequently neglected branch of urology. A more accurate knowledge of the embryological development of the parts and anatomical variations can be determined much more easily now, due to the recent advances made in urology. The advent of the small cystoscope and the use of uroselectan has made visualization of the urinary tract in children as practical as in adults. The co-operation too that now exists between the pediatrician and urologist has helped to make a more accurate diagnosis possible.

Some of the obscure pathological conditions of the urinary tract in children are: congenital valves of the urethra, hypertrophy of the vera-montana, stenosis of the vesical neck, hydro-ureter and malformation of ureters and kidneys. Nerve lesions of the bladder resulting from spina bifida are also frequently overlooked.

We wish to report the following case of vesical calculus in a boy four years old. T. C., admitted to Grady Hospital December 13, 1929, complaining of frequent and painful urination of two years duration. The family history was essentially negative. He was a breast fed baby and had no serious illnesses. He had measles and whooping cough and an occasional attack of sorethroat without complications.

At the age of two years, the mother noticed a rather marked frequency of urination and the child cried while voiding. He was given soda, or similar preparations, for a period of time without any permanent relief of symptoms. The mother was told that there was pus in the specimen of urine and he was put on a urinary antiseptic, presumably urotropin. A little later methylene blue was prescribed, and because of a discharge, treatment for gonorrhea was instituted. He continued to grow worse.

When first seen in the Grady Hospital Clinic, he had to squat to void. It was noticed that there was a sudden shutting off of the stream of urine. He complained a good deal of pain. Urinalysis showed a turbid urine, acid, albumin one plus, sugar negative. Microscopic examination showed many pus cells, red blood cells and staphylococci. The red blood cells numbered 4,880,000, the white blood cells, 17,850, and the Wassermann was negative.

X-ray showed a large shadow in the region of the



X-Ray showing large stone in bladder.

bladder. (Plate). A cystoscopic examination was not done, but at operation, after removing the stone from the bladder, the urethra was explored for evidence of obstruction. The vesical neck was unduly tight and was dilated with a catheter. The patient made an uneventful recovery.

This case, although when first seen in the Clinic, had very evident symptoms of bladder neck obstruction, illustrates the value of a thorough urological examination among children when first seen with urinary symptoms or abnormal changes in the urine. 478 Peachtree Street, N.E.

TREATMENT OF PLACENTA PRAEVIA

According to M. Pierce Rucker, Richmond, Va. (*Jour. A. M. A.*, May 9, 1931), there are certain fundamental principles in the treatment of placenta praevia that should be observed whether the patient is treated in general practice or in a well-equipped obstetric hospital. The significance of a hemorrhage in the last half of pregnancy should not be minimized. Too often the patient is encouraged with the hope that it will not recur. No pelvic examination should be made until everything is in readiness to manage the patient should it be found that the placenta is presenting. A vaginal pack done as a makeshift, *i.e.*, until help can be secured or the patient can be taken to a hospital, probably does more harm than good. A better plan is to give the patient a dose of morphine and disturb her as little as possible. The importance of blood transfusions is self-evident. One cannot show the cervix too much respect. Dilatation should not be hurried and should be complete before any operative delivery, except a Braxton Hicks version, is attempted. If Voorhees bags are used, a No. 5 is preferable.

WOMAN'S AUXILIARY

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"WHERE ARE WE DRIFTING?"*

A. G. FORT†, M. D.
Atlanta

Madam President and Ladies of Woman's Auxiliary to the Medical Association of Georgia:

Second only to the honor of serving as President-Elect of the Medical Association of Georgia, is the distinction it carries of serving as "Big Brother" to your Association.

I have been deprived of close association with the activities, ideas, and ideals of your organization by powers beyond my control; although, I have co-operated in every way I could and appreciate the elevating effect your organization has had on ours.

Not being thoroughly acquainted with your problems, I have chosen today to present for your consideration some of the problems which confront your husbands, fathers, and sweethearts, and are, therefore, of vital interest to you. The man of medicine is no different from the man of law, of religion, or any other laudible profession. His duty to do his best is paramount. At the same time he must watch to prevent being exploited as a duty to you, himself, his profession, and the public.

When I studied medicine, practically every man paid, in labor, time, and money for what he received in the way of an education. The only ones who slaved for us and gave unstintingly of themselves were our teachers, doctors. Too much cannot be said in their praise nor in our appreciation of their efforts. Equipment was lacking, endowments were few and State aid negligible.

When we graduated and had chosen our

field of activity we were expected to take care of the indigent poor. This we did and are doing. For this we are granted one privilege only, that of exemption from jury duty. We appreciate this one recognition, whether deserved or not. At that time clinics were few, hospitals were rare and a recognition on the part of governments of their duty to the individual was masked. While, and as long as, we assumed all responsibility for the sick, poor and rich alike, why should they worry.

Now individuals make up the city, county, state, and nation. These individuals are of value to these units in as far as they can bear arms for their protection and pay taxes for their support. In order that they be able to bear arms and pay taxes they must be taken care of. How, at present, by charity institutions and through clinics. These institutions are growing rapidly and in influence and power. We are called on to render service, we do it, but no provision is ever made to remunerate the physician and too often are those able to pay for service allowed the privileges of these institutions. Be it said to the credit of many of them that efforts are made to protect these institutions and the physician against imposition.

Big business, seeing that it will be called on to bear its share of expense, does what? Just what you or I would do, put forth an effort to protect ourselves and have the job done well and economically. They organize their medical units and give, what we call, contracts to the best men they can secure.

We are called to the colors for the protection of our country. Then the nation realizes that while we must fight, and if need be, give our lives in its service, it must make provision for its fighting force. This they did and did well and, after the crisis

*Address before the Woman's Auxiliary, Atlanta, Ga., May 14, 1931.

†President-Elect of the Medical Association of Georgia.

was over, it provides for all who answered the call.

At the outset, the statement was made that in years gone by each man paid his way. What is the situation now? Our State gives for medical education thousands of dollars, our sectarian independent institutions are heavily endowed and, while it still costs much to study, yet, the student of today does not pay half his way. The time may come when all of his expenses may be paid. Then what! Did you ever hear of a Frenchman who asked of another Frenchman, "I need 500 francs, where can I get it?" "You see that American," replied his friend, "well, he will let you have it." "Yes," replied the other Frenchman, "but that rascal will expect me to pay it back." Now our State and other institutions dominated, not by medical men, are exactly like that American. Some day they are going to expect us to pay it back. What will that mean? Many localities are now, or think they are, without sufficient number of physicians. Men will be drafted and possibly subsidized and sent to these localities. One state has already considered this proposal. It failed, but let the pressure be greater and see what happens. Another state has already had a bill introduced providing that it be organized on the basis of the U. S. Navy Medical Department. If it failed, it still shows the tendency of the times.

What does all this mean?

You, as leaders in your respective communities, see to it that your husband is a member of his county unit and that his unit controls the clinics in that locality. Remember that the people of a community are entitled to medical care, the community should contribute to this care, but the physician should control it and not some charitably inclined church or group.

Encourage your husband to take hold, for if we fail, then the inevitable stares us in the face. Remember this and then answer, "Where are we drifting?" and if toward State Medicine let's be ready for it.

I thank you!

Next annual session of Association will be held at Savannah, May 10-13, 1932.

PRESIDENT'S REPORT*

Matthew Arnold once said that if the time ever came when the best women should unite to serve humanity, they would constitute the strongest force for good that the world has ever known.

Recently in my home town, a man, who was running for political office, became quite indignant because a number of school teachers came out boldly, worked for, voted for, and elected the woman candidate. Up to this time he had not minded the few scattered votes of the women, but when he saw them organize and accomplish the purpose for which they set out, he started writing to the newspapers and saying that he didn't think it right for school teachers to organize. The newspaper editor very promptly replied that school teachers were not only people, but intelligent people and people of character, and that if we would entrust our children to their care, we at least might grant that their voice in a political election would be for the common good. And so today, this, our seventh annual meeting, when we are beginning to understand the needs of our neighbor. I want to urge our women to realize that it is only working in such organized groups that we can accomplish anything of any lasting value.

Georgia needs the help of the intelligent men and women. In a recent investigation it was shown that Georgia gave less to sanitation and public health than any state in the Union; also that the maternity death rate is rising. In 1929, 550 mothers died in childbirth, and in 1930, 658 died. Georgia's rate is 10.7 per 1,000, while Italy's is 2.6 per 1,000. Two-thirds of these mothers could probably have been saved if they had received medical care before, during, and after the baby's birth.

In the past year I have endeavored to carry out the purposes for which we are organized, namely: to encourage the study of health promotion and disease prevention, and to co-operate in every possible way with the Medical Association. I like to think of the Medical Auxiliary, not just as an aid to the Medical Association, but as a link connecting the interests and activities of the doctors with the activities of the laymen. We should continue our program of self-education, for it is only in the getting that we are able to give.

It has been a pleasure to work with the splendid women who have been so active in spreading the news to the people in their communities that if Georgia is to go forward she must have more attention paid to the health of her people. Every committee chair-

*President's report to the seventh annual meeting of the Woman's Auxiliary, Atlanta, Ga., May 14, 1931.

man has been on the job, and I have been constantly corresponding with my officers, standing committee chairmen, auxiliary presidents, and district managers. I shall not attempt to give you any of their reports, for I hope they are here to speak for themselves.

The Chairman of Health Education has been tireless in her efforts to get the message of health work into every county in Georgia. The Ellis Health Law provides for a most efficient program for health work in our counties, and we, as women interested in a better health record for our communities, must be willing to fight, if necessary, in order to have our health work established and continued. Last year we had thirty-six health officers in Georgia,—now we have twenty-eight. We must see to it that our county commissioners and candidates for office do not abolish the Health Officers when they want to cut expenses. In a recent copy of *Georgia's Health*,—the bulletin of the State Board of Health,—there is a small editorial stating that it is in hard times that Health Officers and County Boards of Health are most needed.

The Health Film is a very important method of bringing home certain health facts to our people, and I hope in the future more auxiliaries will avail themselves of this service.

Our President-Elect has labored unceasingly to organize more auxiliaries, and we both have recommended that the women in the smaller counties where there are so few doctors combine into a two-county or tri-county unit.

The Student Loan Fund, which began last year, is receiving increasing interest from our members. Our Chairman of this fund will tell you later what we have done.

This has been an off-year for our committee on Public Policy and Legislation. Two years ago we all got very much interested in a Basic Science Law for Georgia. It did not pass, but it will undoubtedly come up again in some future day, and when it does the women of the Auxiliary will take an interested and vigorous part. It does seem to me that there are people in the state who pass as doctors who are absolutely ignorant in regard to the elementary sciences, physics, chemistry, and physiology. When this fight comes up again, one thousand informed women will be a great help in putting the bill over.

In the past year I have sent out 317 pieces of mail, 190 of which were letters. I have attended five meetings of auxiliaries, in Vidalia, Washington, Athens, Toccoa, and Americus.

Recently, at the invitation of Mrs. M. T.

Edgerton, State Chairman of the Summer-Round-Up of the P.-T. A., I attended the Round-Up dinner. The correcting of physical defects of children before entering school is one of the most worthwhile projects that we can co-operate in.

In closing let me thank all of you who have made it possible for the Auxiliary to continue its work on the high plane set by my predecessors, and to bespeak for my successor your continued support.

MRS. CHAS. C. HARROLD,
President.

Macon, Ga.

REPORT OF THE CHAIRMAN OF ORGANIZATION*

It was a wise provision that made the President-Elect Chairman of Organization, for in the twelve months that followed her coming into that chairmanship, she has had a wonderful opportunity to become acquainted with the auxiliaries in the state, their presidents, and the work they are doing.

I am happy to report that there are thirty auxiliaries, involving thirty-five counties in the state. Of these, there are seven that are functioning this year that were not on the active list last year, namely:

Dooly County, Macon County, and Sumter County, in the Third District.

Troup County, in the Fourth District.

Stephens County, in the Ninth District.

Clarke County, in the Eighth District.

Richmond County, in the Tenth District.

That interest in the Auxiliary is growing is manifested in the increased attendance at local and district meetings, and I believe it will continue to do so.

MRS. RALSTON LATTIMORE,
Savannah, Ga.

*Report of the Chairman to the seventh annual meeting of the Woman's Auxiliary, Atlanta, Ga., May 14, 1931.

MRS. LATTIMORE HEADS AUXILIARY TO MEDICAL ASSOCIATION OF GEORGIA

Mrs. Ralston Lattimore, of Savannah, was elected President of the Woman's Auxiliary to the Medical Association of Georgia at the concluding session of that organization, held recently at the Atlanta Biltmore. The other officers elected were: President-Elect, Mrs. Samuel Revell, Louisville; First Vice-President, Mrs. Bonar White, Atlanta; Second Vice-President, Mrs. C. B. Almand, Winder; Third Vice-President, Mrs. D. N. Thompson, Elberton; Recording Secretary, Mrs. J. E. Penland, Waycross; Corresponding Secretary, Mrs. W. R. Dancy, Savannah; Treasurer, Mrs. Ben Bashinski, Macon; Parliamentarian, Mrs. Allen Bunce, Atlanta; Editor, Mrs. Hugo Johnson, Savannah.

Mrs. C. W. Roberts was the chairman of the Nominating Committee.

The invocation was given by Rev. Dr. Edgar Kerr. Mrs. Bonar White extended greetings to the session, then distinguished guests were introduced, including Mrs. Hunsberger, President of the Woman's Auxiliary to the American Medical Association; Dr. Guerry Morgan, President of the American Medical Association; Dr. L. G. Hardman, Governor of Georgia; Mr. Luke Arnold, of Atlanta.

Dr. Arthur Fort, new President of the Medical Association of Georgia, addressed the auxiliary on *Where Are We Drifting in Medicine?* followed by Dr. Ben Bashinski's paper on *Corrections of Physical Defects in the Pre-school Child*.

After the regular business meeting and reports of officers and special committees, Mrs. John A. Selden, Macon, had three health films shown.

Mrs. Paul Holliday, Athens; Mrs. Bonar White, Mrs. James Brawner, Mrs. Allen Bunce were appointed delegates to the American Medical Association Auxiliary in Philadelphia, June 8-12.

After adjournment the new board met and among special committees appointed were: Health Education, Mrs. Bonar White, Atlanta; Public Policy and Legislation, Mrs. Julian Quattlebaum, Savannah; Students' Educational Fund, Mrs. William Shearouse, Savannah; Scrapbook, Mrs. D. N. Thompson, Elberton.

The next annual meeting will be held in Savannah, May, 1932. The auxiliary looks forward to a year of continued growth under the new officers, all of whom have had experience in auxiliary and club work.

Mrs. Lattimore has been a most efficient President-Elect, organizing new auxiliaries in the state. Mrs. Revell has done some notable work as Chairman of Health Education and First Vice-President. Mrs. White is the able past Recording Secretary and present President of the Fulton County Auxiliary and past President of the Atlanta Shakespeare Class and President of Georgia Tech Woman's Club. Mrs. Dancy was re-elected Corresponding Secretary, due to her efficient work and is the wife of Doctor Dancy, past President of the Medical Society of Georgia. Mrs. Penland is prominent in auxiliary and woman's club work of Waycross and a former Vice-President. Mrs. Almand has been a splendid auxiliary manager of the Ninth District. Mrs. Johnson, most capable manager of the First District, and Mrs. Thompson in the Eighth District, have been untiring. Mrs. Ben Bashinski's re-election as Treasurer was most gratifying, as was that of Mrs. Bunce for Parliamentarian. Mrs. Bashinski is past President of the Macon Auxiliary, and Mrs. Bunce of Fulton County and A. M. A. Auxiliary.

Mrs. Allen Bunce, Mrs. James Brawner, Mrs. Bonar White, after the general meeting, entertained in honor of Mrs. Hunsberger, National Auxiliary President. About fifty guests assembled in the Crystal Room of the Biltmore to meet Mrs. Hunsberger and have lunch with her.

In the evening the annual banquet was held, and several hundred wives participated in this beautiful

affair at which the local woman's auxiliary was hostess to the visitors. The Pompeian Room was a bower of loveliness, Mrs. S. L. Shackelford and her committee having arranged all the flowers. Mrs. James Brawner gave the invocation. Mrs. Bonar White was toastmistress, introducing about twenty-eight guests, including Mrs. Hunsberger, Mrs. Harrold, Mrs. Moore, and the state and county officers.—*Atlanta Journal*, Atlanta, May 19, 1931.

NEWS ITEMS

The Atlanta Neurological Society, at a recent meeting, elected the following officers for the ensuing year: Dr. H. M. Bowcock, Atlanta, President; Dr. Albert F. Brawner, Atlanta, Vice-President; Dr. Richard B. Wilson, Atlanta, Secretary-Treasurer.

The Fourth District Medical Association met at Warm Springs on May 28th. The following titles made up the scientific program: *Hypothyroidism in Children*, Dr. Jas. A. Wood, Atlanta; *The Thyroid*, Dr. Floyd McRae, Atlanta; *Basal Metabolism, Its Limitations and Value in Diagnosis and Treatment Control*, Major Samuel A. White, U. S. Army, Fort Benning; *Hypopituitarism and Hypogonadism*, Trimble Johnson, Atlanta; *Hypopituitarism (Anterior Lobe)*, Dr. T. L. Byrd, Atlanta; *Hyperpituitarism (Anterior Lobe)*, Dr. Jas. K. Fancher, Atlanta, *Hypovarianism*, Dr. Ed. Greene, Atlanta.

The Georgia Urological Association elected the following officers on May 15th: Dr. W. F. Reavis, Waycross, President; Dr. Ernest Corn, Macon, President-Elect; Dr. Allen F. Caldwell, Atlanta, Secretary-Treasurer. The following were appointed as an Executive Committee: Dr. Wallace Bazemore, Macon; Dr. Wm. Shearouse, Savannah, and Dr. J. C. Keaton, Albany.

Dr. Richard Binion, Milledgeville, has been elected to Senior Fellowship in the Southeastern Surgical Congress.

The Burke County Medical Society held its monthly meeting at the Community House in Midville, May 7th. The following doctors were on the program: Dr. G. T. Bernard, Augusta; Dr. Irvine Phinizy, Augusta; Dr. Q. A. Mulkey and Dr. M. E. Perkins, Millen; Dr. W. R. Lowe and Dr. W. H. Sutton, Midville. Dr. H. F. Bent, Midville, was host to all the attendants at a fish supper.

The Jefferson County Medical Society met at the Community House at Wrens, on May 1st. Decorations were in charge of Mrs. J. J. Pilcher, Wrens. The dining room and tables were artistically decorated with ribbon and spring flowers. A scientific meeting was held by the physicians after dinner was served.

The regular staff meeting of the Crawford W. Long Memorial Hospital and Clinic was held on April 9th. Dr. Frank K. Boland, Atlanta, read a paper on

Injuries of the Lungs and Pleura; Dr. Lynn Fort, Atlanta, *A Few Observations With Intravenous Cholecystography*.

Dr. Frank K. Boland and Dr. Jas. E. Paullin, both of Atlanta, appear on the tentative program of the Inter-State Post Graduate Medical Association of North America for its meeting, to be held at Milwaukee, Wis., October 19th to 23rd.

Dr. L. G. Neal, formerly of Cleveland, Ga., has moved to Gainesville.

The House of Delegates at the last annual session of the Association approved a plan for Group Insurance. The members of the Medical Association of Georgia may avail themselves of this opportunity to secure renewal term insurance at a very low rate without physical examination. Additional information, with rates, is printed in communications under the subject *Insurance*.

A national plan for the establishment of morbidity reporting areas was adopted April 28th by the Conference of State and Territorial Health Officers, at Washington, D. C., as a means of stimulating co-operation between state and local health agencies and the United States Public Health Service in the reporting of health statistics by local areas to the Government Service.

The S. M. A. Corporation, Cleveland, Ohio, contributed to the publicity of Hospital Day by broadcasting over a number of radio stations on May 11th and 12th the following announcement:

"Tuesday, May 12th, is National Hospital Day, when hospitals all over America are inviting people to visit them. A popular feature will be the parties at maternity hospitals for babies born during the past year at these hospitals. Find out about the hospitals in your community by visiting them May 12th. See what fine institutions they are, dedicated to the merciful and scientific care of human life, and operated by trained, hard-working, self-sacrificing doctors and nurses."

More than a year ago the Research Division of S. M. A. Corporation discovered a method of putting cream in cans. This is a product sold to the public in grocery and delicatessen stores. It is advertised in this Journal.

The American College of Physicians will hold its Sixteenth Annual Clinical Session at San Francisco, with headquarters at the Palace Hotel, April 4-8, 1932. Following the Clinical Session, a large percentage of the attendants will proceed to Los Angeles where a program, principally of entertainment, will be furnished April 9th, 10th, and 11th. Announcement of the dates is made particularly with a view not only of apprising physicians generally of the meeting, but also to prevent conflicting dates with other societies that are now arranging their 1932 meetings.

Dr. S. Marx White, of Minneapolis, is President of the American College of Physicians, and will arrange the Program of General Sessions. Dr. William J. Kerr, Professor of Medicine at the University of California Medical School, San Francisco, is General Chairman of local arrangements, and will be in charge of the Program of Clinics. Dr. Francis M. Pottenger, of Monrovia, is President-Elect of the College, and will be in charge of the arrangements at Los Angeles. E. R. Loveland, Executive Secretary, 133-135 South Thirty-sixth Street, Philadelphia, Pa., is in charge of general and business arrangements, and may be addressed concerning any feature of the forthcoming session.

The Randolph County Medical Society met at Cuthbert on June 4th. Dr. A. L. Crittenden, Shellman, and Dr. Loren Gary, Georgetown, gave case reports.

Agents of the Federal Food and Drug Act report the seizure of a shipment of "Insulol", shipped by a company in Germany to a New York firm. The report contains a warning against diabetes nostrums, which, in part, is as follows: "Persons suffering from diabetes should not rely on the curative claims made by manufacturers of worthless nostrums, since there is no drug, or combination of drugs, known to medical science which can cure this disease. The only safe and reliable treatment for this disease is the continued hypodermic injection of insulin, together with a suitable diet, and this is not to be considered a cure. Every country has its favorite herb, superstitiously believed to have curative value for diabetes. None of these herbs has cured the disease. Analysis by Federal chemists and pharmacologists showed that the preparation, "Insulol", contained no ingredient nor combination of ingredients capable of producing the effects claimed upon the label."

Dr. Stewart R. Roberts, Atlanta, read a paper entitled, *Nervous and Mental Influences in Angina Pectoris*, before the seventh annual scientific session of the American Heart Association, Inc., at Philadelphia, on June 9th.

The gavel used each year during the annual session of the Association by its President, is a continuous reminder of the discoverer of ether anesthesia, Dr. Crawford W. Long. The inscription on the gavel is as follows:

"Presented to
Medical Association of Georgia
Savannah, May, 1928

From the
Family of Crawford W. Long
Made from Newel Post in Dr. Long's Home
In Athens, Georgia."

The Chattrahoochee Valley Medical and Surgical Association will meet in Albany, July 14th and 15th.

MEMBERS REGISTERING AT THE EIGHTY-SECOND ANNUAL SESSION

ATLANTA, MAY 12, 13, 14, 15, 1931

A

Abercrombie, T. F., Atlanta.
 Adair, E. W., Atlanta.
 Adams, Charlie, Cordele.
 Adams, F. L., Elberton.
 Adkins, Chas. P., Atlanta.
 Akerman, Joseph, Augusta.
 Alden, Herbert, Atlanta.
 Alexander, G. H., Forsyth.
 Allen, H. D., Jr.,
 Milledgeville.
 Allen, L. C., Hoschton.
 Almond, C. B., Winder.
 Alsobrook, J. S., Rossville.
 Amis, F. J., Hogansville.
 Anderson, Wm. W., Atlanta.
 Ansley, H. G., Decatur.
 Applewhite, J. D., Macon.
 Arnold, J. T., Parrott.
 Askew, H. H., Atlanta.
 Askew, P. H., Nashville.
 Ault, H. J., Dalton.
 Austin, W. H., Griffin.
 Aven, C. C., Atlanta.
 Avera, J. B., Brunswick.
 Aycock, Mell, Atlanta.
 Ayer, G. D., Atlanta.
 Ayers, A. J., Atlanta.
 Ayers, C. L., Toccoa.

B

Baggett, L. G., Atlanta.
 Bagley, D. A., Atlanta.
 Bagley, R. H., Atlanta.
 Bailey, D. V., Elberton.
 Bailey, E. M., Acworth.
 Bailey, M. K., Atlanta.
 Baird, Jas. B., Atlanta.
 Baker, W. Pope, Atlanta.
 Ballenger, E. G., Atlanta.
 Ballenger, W. L., Atlanta.
 Bancker, E. A., Jr., Atlanta.
 Banister, H. G., Ila.
 Barber, W. E., Atlanta.
 Barfield, F. M., Atlanta.
 Barfield, J. R., Atlanta.
 Barnett, S. T., Atlanta.
 Barrow, Craig, Savannah.
 Bartholomew, R. A., Atlanta.
 Bashinski, Benj., Macon.
 Bazemore, Wallace L.,
 Macon.
 Bealer, Frank R., Atlanta.
 Beall, C. R. F., Atlanta.
 Beasley, B. T., Atlanta.
 Belcher, F. S., Monticello.
 Bennett, V. H., Gay.
 Benson, Marion T., Atlanta.
 Birdsong, H. W., Athens.

Bishop, E. L., Atlanta.
 Bivings, Lee, Atlanta.
 Blackford, L. Minor,
 Atlanta.
 Blackburn, Jno. D., Atlanta.
 Blackman, W. W., Atlanta.
 Blalock, J. C., Atlanta.
 Blincoe, Homer, Emory
 University.
 Block, Bates, Atlanta.
 Boland, Frank K., Atlanta.
 Boland, S. A., Jefferson.
 Boling, Edgar, Atlanta.
 Booth, Wm. S., Emory
 University.
 Bowcock, Harold M.,
 Atlanta.
 Bowdoin, Joe P., Adairsville.
 Boyd, Montague L., Atlanta.
 Boynton, Chas. E., Atlanta.
 Bradford, J. E., Spring Place.
 Brawner, A. F., Atlanta.
 Brawner, Jas. N., Atlanta.
 Brawner, Leon E., Atlanta.
 Brice, J. Theo., Atlanta.
 Bridges, R. R., Leary.
 Brooke, G. C., Canton.
 Brown, Stewart D., Royston.
 Brown, S. Ross, Hines, Ill.
 Brown, Stephen T., Atlanta.
 Bryant, C. H., Comer.
 Buff, J. H., Atlanta.
 Bullard, T. P., Palmetto
 Bunce, Allen H., Atlanta.
 Burch, J. C., Atlanta.
 Burgess, T. S., Atlanta.
 Burke, B. Russell, Atlanta.
 Burns, J. K., Gainesville.
 Busey, T. J., Fayetteville.
 Bush, O. B., Atlanta.
 Byne, J. M., Waynesboro.
 Byne, J. M., Jr.,
 Waynesboro.
 Byram, Jas. H., Atlanta.
 Byrd, Mack M., West Point.
 Byrd, T. Luther, Atlanta.

C

Cabaniss, W. H., Athens.
 Caldwell, A. F., Atlanta.
 Calhoun, Abner W., Atlanta.
 Calhoun, F. Phinizy,
 Atlanta.
 Camp, R. T., Fairburn.
 Camp, W. R., Fairburn.
 Campbell, J. L., Atlanta.
 Campbell, M. G., Atlanta.
 Carter, R. L., Thomaston.
 Cason, H. B., Jr., Warrenton.

Cason, W. M., Sandersville.
 Chambers, J. A. S., Inman.
 Champion W. L., Atlanta.
 Charlton, Thos. J., Savannah.
 Cheek, O. H., Dublin.
 Childs, J. R., Atlanta.
 Childs, LeRoy W., Atlanta.
 Chrisman, W. W., Macon.
 Christopher, F. E., Atlanta.
 Clark, Jas. J., Atlanta.
 Clark, M. A., Macon.
 Clark, W. H., LaGrange.
 Claxton, E. B., Dublin.
 Clay, Grady E., Atlanta.
 Clifton, Ben H., Atlanta.
 Cline, B. Mc. H., Atlanta.
 Clodfelter, T. C., Eatonton.
 Cochran, J. S., Norcross.
 Cofer, O. S., Atlanta.
 Coile, F. W., Winterville.
 Coker, Grady N., Canton.
 Collins, Thos. J., Atlanta.
 Collins, Thos. W.,
 College Park.
 Coleman, A. S. M., Douglas.
 Coleman, Warren A.,
 Eastman.
 Coleman, Y. R., Macon.
 Combs, J. A., Atlanta.
 Cone, R. L., Statesboro.
 Cook, Wm. S., Albany.
 Cooke, W. L., Columbus.
 Cooper, J. J., Cedartown.
 Copeland, H. W., Griffin.
 Copeloff, M. B., Atlanta.
 Corn, Ernest, Macon.
 Cornwell, G. K.,
 Milledgeville.
 Corricher, D. C., Atlanta.
 Cosby, F. L., Columbus.
 Cousins, W. L., Atlanta.
 Covington, J. F., Norcross.
 Crawford, C. B., Blue Ridge.
 Crawford, Herschel C.,
 Atlanta.
 Crawford, J. H., Atlanta.
 Crawford, R. L., Locust
 Grove.
 Crawley, W. G., Rome.
 Crichton, Robt. B., Atlanta.
 Cross, J. B., Atlanta.
 Crozier, G. T., Valdosta.
 D
 Daly, Leo P., Atlanta.
 Daniel, Chas. H., College
 Park.
 Daniel, W. W., Atlanta.
 Daniels, Chas. W., Atlanta.

Dancy, Wm. R., Savannah.
 Davenport, T. F., Atlanta.
 Davis, A. W., Warrenton.
 Davis, B. B., Gainesville.
 Davis, E. B., Byromville.
 Davis, J. Weyman, Athens.
 Davis, T. H., Macon.
 Davison, Hal M., Atlanta.
 Davison, T. C., Atlanta.
 Donaldson, H. R., Atlanta.
 DuVall, Beecher, Atlanta.
 Dean, J. G., Dawson.
 Dell, J. M., Jr., Atlanta.
 Dellinger, A. H., Rome.
 Dickson, Roger W., Atlanta.
 Dillard, G. J., Columbus.
 Dimmock, A. M., Atlanta.
 Dorrough, W. S., Atlanta.
 Dorsey, R. T., Atlanta.
 Dowman, Chas. E., Atlanta.
 Downey, J. H., Gainesville.
 Dougherty, Mark S., Atlanta.

E

Easley, Frank, Dalton.
 Echols, Geo. L., Milledgeville.
 Edgerton, M. T., Atlanta.
 Edmondson, J. W., Dublin.
 Elliott, W. G., Cuthbert.
 Elkin, Dan C., Atlanta.
 Elmore, B. V., Rome.
 Ellis, Chas. L., Kingston.
 Elrod, J. O., Forsyth.
 Emery, W. B., Atlanta.
 Euen, Murdock, Atlanta.
 Eubanks, Geo. F., Atlanta.
 Evans, J. Rufus, Stone
 Mountain.
 Ezell, H. E., Oliver.

F

Fancher, J. K., Atlanta.
 Fanning, O. O., Atlanta.
 Ferguson, I. A., Atlanta.
 Fike, R. H., Atlanta.
 Fincher, E. F., Jr., Atlanta.
 Findley, C. W., Vidalia.
 Fischer, L. C., Atlanta.
 Fitts, Jno. B., Atlanta.
 Floyd, Chas. S., Loganville.
 Floyd, Earl, Atlanta.
 Floyd, J. T., Atlanta.
 Floyd, Waldo E., Statesboro.
 Flowers, J. E., Doraville.
 Fort, A. G., Atlanta.
 Fort, M. A., Bainbridge.
 Fountain, Jas. A., Macon.
 Fowler, M. F., Atlanta.
 Fowler, R. W., Marietta.
 Franklin, R. C., Swainsboro.
 Frye, A. H., Griffin.
 Fuller, Geo. W., Atlanta.
 Fullilove, H. M., Athens.
 Funkhouser, W. L., Atlanta.

G

Gaines, Lewis M., Atlanta.
 Gardner, W. A., Atlanta.
 Garner, J. R., Atlanta.
 Garner, W. R., Gainesville.
 Garrard, J. L., Rome.
 Garrison, D. H., Tate.
 Garrison, W. W.,
 Clarkesville.
 Gary, Loren, Georgetown.
 Gausemel, S. D., Atlanta.
 Gay, J. Gaston, Atlanta.
 Gay, T. Boling, Atlanta.
 Gerdine, Linton, Athens.
 Gilbert, R. B., Greenville.
 Gilliam, O. D., Columbus.
 Goldsmith, L. H., Atlanta.
 Goldsmith, W. S., Atlanta.
 Goodpasture, W. C., Atlanta.
 Goodwyn, H. J., Carrollton.
 Goodwyn, Thos. P., Atlanta.
 Goolsby, R. Cullen, Jr.,
 Macon.

Goolsby, R. Cullen, Sr.,
 Forsyth.

Green, A. J., Union City.
 Greene, Ed. H., Atlanta.
 Greer, Chas. A., Oglethorpe.
 Griffin, Claude, Atlanta.
 Griffiths, T. H. D., Albany.
 Grove, Lon, Atlanta.
 Guest, R. J., Emory
 University.

Guthrie, N. J., Atlanta.

H

Hailey, Howard, Atlanta.
 Hair, W. B., Summerville.
 Hall, C. E., Atlanta.
 Hall, C. E., Jr., Atlanta.
 Hall, Jno. I., Macon.
 Hall, O. D., Atlanta.
 Hall, W. L., Nicholls.
 Hammond, G. W., Newnan.
 Hammond, R. L., Jackson.
 Hanson, J. Fletcher, Atlanta.
 Harbin, R. M., Rome.
 Harbin, R. M., Jr., Rome.
 Harrell, H. P., Augusta.
 Harrington, F. Y., Macon.
 Harrison, M. T., Atlanta.
 Harrold, C. C., Macon.
 Harrold, Thos., Macon.
 Harvard, V. O., Orabi.
 Harvey, C. W., Hogansville.
 Hattaway, J. C., Jr., Edison.
 Haygood, M. F., Alto.
 Head, M. M., Zebulon.
 Helton, B. L., Sandersville.
 Henry, J. Z., Ellenwood.
 Herman, Emery C.,
 LaGrange.
 Hewell, Guy C., Dewey Rose.

Hill, R. A., Thomasville.
 Hilsman, A. H., Albany.
 Hinton, Chas. C., Macon.
 Hodges, Chas. A., Dublin.
 Hodges, J. H., Hapeville.
 Hodgson, Fred G., Atlanta.
 Holmes, Champ, Atlanta.
 Holmes, L. P., Augusta.
 Holmes, Walter R., Atlanta.
 Holliday, Paul L., Athens.
 Holloway, G. A., Augusta.
 Hope, H. F., Atlanta.
 Hoppe, L. D., Atlanta.
 Horton, B. E., Atlanta.
 Houseworth, D.,
 Douglasville.

Howard, Lee, Savannah.
 Hubbard, F. M., Commerce.
 Hubert, M. A., Athens.
 Huguley, G. Pope, Atlanta.
 Hunnicutt, J. A., Athens.
 Hunt, K. S., Griffin.
 Hunter, Conway, Atlanta.
 Hutchins, J. T., Atlanta.
 Hutchins, W. J., Buford.
 Hutto, W. E., Atlanta.

I

Irvin, I. W., Albany.
 Isbell, J. E. D., Toccoa.

J

Jackson, J. B., Clarkesville.
 Jackson, T. W., Manchester.
 Jackson, Zach W., Atlanta.
 Jenkins, J. I., Hartwell.
 Jenkins, O. W., Atlanta.
 Jernigan, H. W., Atlanta.
 Joiner, Hartwell, Gainesville.
 Johnson, A. S., Elberton.
 Johnson, Trimble, Atlanta.
 Johnston, Z. V., Calhoun.
 Jones, Jack W., Atlanta.
 Jones, W. Wardlaw, Atlanta.
 Jordan, J. R., Ellaville.
 Jordan, W. P., Columbus.

K

Kay, Jas. B., Byron.
 Keaton, J. C., Albany.
 Keen, O. F., Macon.
 Kelley, D. C., Lawrenceville.
 Kelley, L. H., Atlanta.
 Kelley, W. A., Smyrna.
 Kelly, G. L., Augusta.
 Kennedy, B. L., Dalton.
 Kennedy, H. B., Atlanta.
 Kenyon, Steve B., Dawson.
 Key, Claud T., Atlanta.
 King, Lewell S., Atlanta.
 King, O. D., Carrollton.
 Kirkland, Spencer A.,
 Atlanta.
 Kiser, W. H., Jr., Atlanta.
 Kite, J. H., Decatur.

Kitts, A. W., Atlanta.
 Klausman, M., Atlanta.
 Klugh, Geo. F., Atlanta.
 Kracke, Roy R., Emory
 University.

L

Lake, Wm. F., Atlanta.
 Lamb, E. H., Cornelia.
 Lamb, R. B., Demorest.
 Lancaster, E. M., Shady Dale.
 Lancaster, H. H., Clermont.
 Landham, J. W., Atlanta.
 Lang, G. H., Savannah.
 Lanier, J. E., Moultrie.
 Lattimore, Ralston,
 Savannah.

Lawrence, Chas. E., Atlanta.
 Leadingham, Roy S., Atlanta.
 Lewis, J. H., Davisboro.
 Levy, M. S., Augusta.
 Lynch, A. O., Atlanta.
 Lindroth, Eric, Atlanta.
 Lipscomb, W. E., Cumming.
 Little, Arthur D.,
 Thomasville.

Logan, J. C., Plains.
 Lokey, Hugh M., Atlanta.
 Love, Jno. L., Atlanta.
 Lowrance, M. I., Atlanta.
 Lyle, W. C., Atlanta.

M

Mallory, R. A., Concord.
 Malone, O. T., Atlanta.
 Malone, S. B., Sandersville.
 Mann, F. R., McRae.
 Martin, F. M., Shellman.
 Martin, J. D., Atlanta.
 Martin, J. J., Atlanta.
 Martin, R. V., Savannah.
 Martin, W. O., Jr., Atlanta.
 Massee, J. C., Atlanta.
 Massenburg, G. Y., Macon.
 Matthews, O. H., Atlanta.
 Mathews, W. L., Winder.
 Meeks, D. H., Nicholls.
 Mehl, Rudolph A., Atlanta.
 Mercer, J. E., Vidalia.
 Michel, H. M., Augusta.
 Middlebrooks, C. O., Athens.
 Miles, W. C., Griffin.
 Miller, Hal, Atlanta.
 Miller, Lila Bonner, Atlanta.
 Miller, W. A., Arabi.
 Mims, F. C., Atlanta.
 Minchew, B. H., Waycross.
 Minor, H. W., Atlanta.
 Mitchell, S. R., Pineview.
 Mixson, W. D., Waycross.
 Mizell, Geo. C., Atlanta.
 Mobley, J. W., Jr., Pelham.
 Monfort, J. M., Atlanta.
 Moon, P. L., Atlanta.

Moore, G. Y., Cuthbert.
 Moore, H. M., Thomasville.
 Moore, R. M., Waleska.
 Morris, S. L., Jr., Atlanta.
 Moye, C. G., Brewton.
 Mulkey, Q. A., Millen.
 Mulherin, Wm. A., Augusta.
 Murphey, E. E., Augusta.
 Murphy, F. B., Canton.
 Murray, George M., Atlanta.
 Muse, L. H., Atlanta.
 Myers, H. C., Atlanta.
 Myers, Wm. H., Savannah.

MC

McAfee, J. C., Macon.
 McAfee, L. C., Macon.
 McAliley, R. G., Atlanta.
 McAllister, J. M. C.,
 Rochelle.
 McArthur, Chas E., Atlanta.
 McArthur, Thos. J., Cordele.
 McCall, J. T., Rome.
 McCarver, W. C., Vidette.
 McClung, R. H., Atlanta.
 McClure, R. E., Quitman.
 McCord, M. M., Rome.
 McCulloh, Hugh, Sr.,
 West Point.

McCullough, K., Waycross.
 McCurdy, E. C., Shellman.
 McCurdy, W. T., Stone
 Mountain.
 McCurdy, W. T., Jr., Stone
 Mountain.

McCurry, W. E., Hartwell.
 McDonald, H. P., Atlanta.
 McDaniel, J. G., Atlanta.
 McDougall, Wm. L.,
 Atlanta.
 McDougall, J. Calhoun,
 Atlanta.
 McDuffie, H. F., Atlanta.
 McElveen, J. M., Brooklet.
 McGeary, W. C., Madison.
 McGinty, Park, Atlanta.
 McGarity, J. A., Atlanta.
 McKinney, J. C., Athens.
 McRae, Floyd W., Atlanta.

N

Nash, T. C., Philomath.
 Neel, M. M., Atlanta.
 Nesbit, F. C., Atlanta.
 Newberry, R. E., Atlanta.
 Newman, W. A., Macon.
 Nicholson, J. H., Atlanta.
 Niles, Geo. M., Atlanta.
 Norman, Frank, Columbus.
 Nutt, J. J., Bowdon.

O

O'Daniel, G. R., Atlanta.
 Olds, Bomar A., Atlanta.
 O'Neal, R. S., LaGrange.

Oppenheimer, R. H.,
 Emory University.
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 Owens, J. D., Augusta.
 Owensby, N. M., Atlanta.

P

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 Peeler, J. E., Woodland.
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 Pennington, J. E., Esom Hill.
 Pentecost, Mark P., Atlanta.
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 Person, W. E., Atlanta.
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 Peterson, N., Tifton.
 Petway, T. F., Atlanta.
 Pierce, L. W., Macon.
 Pinson, C. H., Hapeville.
 Pirkle, W. W., Cumming.
 Pittman, C. S., Tifton.
 Pittman, J. L., Atlanta.
 Poer, D. Henry, Atlanta.
 Poer, J. M., West Point.
 Poole, E. T., Lavonia.
 Porch, Leon D., Macon.
 Porter, J. L., Rutledge.
 Prather, W. S., Americus.
 Pruitt, M. C., Atlanta.
 Purks, W. K., Atlanta.

Q

Quattlebaum, J. K.,
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 Quillian, G. W., Atlanta.
 Quillian, W. Earl, Atlanta.

R

Randolph, W. T., Winder.
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 Rawls, L. L., Macon.
 Reavis, W. F., Waycross.
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 Redd, Stephen C., Atlanta.
 Reed, Clinton, Atlanta.
 Rehberg, A. W., Cairo.
 Reese, D. S., Carrollton.
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 Rhodes, C. A., Atlanta.
 Rhodes, John A.,
 Crawfordville.
 Rhodes, R. L., Augusta.

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Rice, Keith C., Atlanta.
Ridley, C. L., Macon.
Riley, Julian G., Atlanta.
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Robban, L. J., Augusta.
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Roberts, Stewart R., Atlanta.
Roberts, Will, Atlanta.
Rogers, F. D., Coleman.
Rogers, J. H., Atlanta.
Rogers, J. V., Cairo.
Rollins, J. C., Dalton.
Rosenberg, H. J., Atlanta.
Rouglin, Louis C., Atlanta.
Rozar, A. R., Macon.
Rushin, C. E., Atlanta.
S
Sage, Dan Y., Atlanta.
Sams, J. Roscoe, Covington.
Sanders, A. S., Atlanta.
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Atlanta.
Shamblin, A. J. C., Cartersville.
Shanks, Edgar D., Atlanta.
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Shellhorse, E. O., Dalton.
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Simmons, Walter E., Metter.
Sims, W. C., Richland.
Sinkoe, S. J., Atlanta.
Slack, Henry R., LaGrange.
Smith, Archibald, Atlanta.
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Smith, Carter, Atlanta.
Smith, B. T., Cornelia.
Smith, E. C., Donalsonville.
Smith, F. A., Elberton.
Smith, Geo. B., Rome.
Smith, Herschel A., Americus.
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Smith, J. M., Valdosta.
Smith, M. E., Grantville.
Smith, M. F., Atlanta.
Smith, M. R., Cordele.
Smith, Randolph, Atlanta.
Smith, Simon H., Atlanta.
Smith, S. S., Athens.
Smith, Wm. A., Atlanta.
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Snelling, W. R., Augusta.
Sommerfield, J. E., Atlanta.
Spearman, G. F., Atlanta.
Stampa, S., Atlanta.
Stephens, Robt. G., Atlanta.
Stewart, Calvin B., Atlanta.
Stewart, J. C., Atlanta.
Stewart, Phil, Atlanta.
Stockard, Cecil, Atlanta.
Story, W. E., Emory
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Story, W. L., Ashburn.
Stillman, W. K., Jr., Atlanta.
Strickler, C. W., Atlanta.
Strickler, C. W., Jr., Atlanta.
Swanson, Cosby, Atlanta.
Swint, R. C., Milledgeville.
T
Tankersly, J. S., Ellijay.
Teasley, B. C., Hartwell.
Tessier, L. P., Augusta.
Thompson, C., Millen.
Thompson, D. N., Elberton.
Thompson, D. O., Atlanta.
Thornton, Lawson, Atlanta.
Thrash, E. C., Atlanta.
Tidmore, T. L., Atlanta.
Toepel, Theodore, Atlanta.
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Tucker, E. V., Atlanta.
Turk, Jno. P., Nelson.
Turk, L. N., Jr., Atlanta.
Turner, Jno. W., Atlanta.
Tye, J. P., Albany.
Tye, Robt. L., McDonough.
U
Upchurch, W. A., Atlanta.
Upshaw, C. B., Atlanta.
Upshaw, Harry L.,
Social Circle.
V
VanDyke, A. H., Atlanta.
Vansant, C. V., Douglasville.
Vansant, T. J., Woodstock.
Vernon, Edgar A., Atlanta.
W
Waits, Chas E., Atlanta.
Walker, D. D., Macon.
Walker, E. Y., Atlanta.
Walker, Sidney, Dublin.
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Wall, J. Cox, Eastman.
Ward, J. J., Roopville.
Ware, Ford, Americus.
Ware, F. L., Warrenton.
Ware, R. M., Fitzgerald.
Waters, W. C., Atlanta.
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Watkins, E. C., Brooklet.
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Wells, W. F., Atlanta.
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Wise, B. T., Americus.
White, A. F., Flovilla.
Whitely, Seals L.,
Cedartown.
Wilkinson, W. L.,
Bainbridge.
Williams, Geo. A., Atlanta.
Williams, T. C., Valdosta.
Willis, L. W., Bainbridge.
Wilson, B. V., Decatur.
Wilson, E. B., Macon.
Wilson, J. R., Thomson.
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Wood, D. Lloyd, Atlanta.
Wood, Jas. A., Atlanta.
Wood, R. Hugh, Atlanta.
Y
Yampolsky, Joseph, Atlanta.
Yarbrough, Y. H.,
Milledgeville.
York, J. H., Atlanta.
Youmans, H. D., Lyons.
Young, W. W., Atlanta.

GUESTS AND VISITORS

- Boswell, Chas W., Jersey City, N. J.
Clegg, F. Boykin, Greenville, S. C.
Fowler, A. H., Langley, S. C.
Griffin, E. W., Townsend, Tenn.
Herrick, Jas B., Chicago.
Howell, J. R., Aiken, S. C.
Love, W. J., Opelika, Ala.

- May, J. M., Hayesville, N. C.
McCloud, C. N., St. Paul, Minn.
Morgan, Wm. Gerry, Washington, D. C.
Rosser, Chas. M., Dallas, Texas.
Schenck, H. C., Alto, Ga.
Sellers, T. F., State Board of Health,
Atlanta.
VanDeVrede, Jane, Georgia State Nurses'
Association, Atlanta.

COMMERCIAL EXHIBITORS AND REPRESENTATIVES

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Lillian B. Storms, Fremont, Mich.

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E. A. Lang, Atlanta.

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Mrs. E. B. Ray, Atlanta.

Elenor Singleton, Atlanta.

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C. E. Molaby, Brooklyn, N. Y.

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S. & H. X-Ray Co., Atlanta.

Southern Medical Association, Birmingham, Alabama:

Miss Rachel Farrow, Birmingham, Ala.

Southeastern Optical Co., Atlanta:

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Spinach Products Co., Columbia, S. C.:

Ralph T. Pool, Columbia, S. C.:

Squibb & Sons, E. R., New York City:

H. D. Crowe, Atlanta.

Wocher & Sons Co., Max, Cincinnati, Ohio:

Ben Perryman, Atlanta.

BOOKS RECEIVED

The Treatment of Injury by the General Practitioner. By Clay Ray, M. D., Assistant Professor of Surgery, College of Physicians and Surgeons, Columbia University; Associate Visiting Surgeon, Presbyterian Hospital, New York City. Contains 412 pages, with 196 drawings. Publishers: Harper & Brothers, 49 East 33rd Street, New York City. Price \$5.00.

An Introduction to Gynecology. By C. Jeff Miller, M. D., Professor of Gynecology, Tulane University School of Medicine; Chief of the Department of Gynecology of Touro Infirmary; Senior Visiting Surgeon, Charity Hospitals, New Orleans, La. Contains 327 pages, illustrated. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Mo. Price \$5.00.

Diabetes, Its Treatment by Insulin and Diet—A Handbook for the Patient. By Orlando H. Petty, M. D., Professor of Diseases of Metabolism, Graduate School of Medicine, University of Pennsylvania; Physician in Charge of Departments of Metabolism, Hospitals of the Graduate School of Medicine, University of Pennsylvania, and Philadelphia General Hospital; Consultant in Diseases of Nutrition and Metabolism, Shriners' Hospitals for Crippled Children, Philadelphia Unit. Fifth revised and enlarged edition. Contains 231 pages, with illustrations and tables. Publishers: F. A. Davis Company, Philadelphia, Pa.

Health on the Farm and in the Village. A Review and Evaluation of the Cattaraugus County Health Demonstration with Special Reference to its Lessons for Other Rural Areas. By C. E. A. Winslow, Dr. P. H., Professor of Public Health, Yale School of Medicine. Contains 281 pages. Publishers: The Macmillan Company, New York City. Price \$1.00.

Clinical Diagnosis by Laboratory Methods. By James Campbell Todd, Ph.B., M. D., Late Professor

of Clinical Pathology, University of Colorado, School of Medicine; and Arthur Hawley Sanford, A. M., M. D., Professor of Clinical Pathology, University of Minnesota (Mayo Foundation); Head of Section on Clinical Laboratories, Mayo Clinic. Seventh Edition, thoroughly revised. 765 pages, with 347 illustrations, 29 in colors. Publishers: W. B. Saunders Company, West Washington Square, Philadelphia, Pa. Price \$6.00.

Nutrition and Diet in Health and Disease. By James S. McLester, M.D., Professor of Medicine at the University of Alabama, Tuscaloosa, Ala. Second Edition, revised and reset. Octavo of 891 pages. Publishers: W. B. Saunders Company, West Washington Square, Philadelphia, Pa. Price \$8.50.

Hemorrhoids—The Injection Treatment and Pruritus Ani. By Lawrence Goldbacher, M.D., Philadelphia. Second revised edition. Contains 207 pages. Publishers: F. A. Davis Company, Philadelphia, Pa.

Practical Dietetics for Adults and Children in Health and Disease. By Sanford Blum, M.D., Head of Department of Pediatrics and Director of the Research Laboratory, San Francisco Polyclinic and Post-Graduate School. Fourth edition (revised and enlarged. Contains 380 pages. Publishers: F. A. Davis Company, Philadelphia. Price \$4.00.

OBITUARY

Dr. James Clarence Daniel, Decatur; member, University of Georgia Medical Department, Augusta, 1902; aged 61; died at his home on May 15, 1931. He had practiced medicine in Decatur for about eight years. Prior to that time Doctor Daniel practiced at Statham for many years. He was active in church work. Doctor Daniel was a member of the DeKalb County Medical Society, Statham Lodge of F. & A. M., and the First Baptist Church of Decatur. Surviving him are his widow; one son, Geo. L. Daniel, Decatur; one daughter, Mrs. Talmadge F. Harden, Commerce. Funeral services were conducted from the First Baptist Church of Decatur by Dr. A. J. Moncrief and Dr. Ellis A. Fuller. Interment was in Bethabara Cemetery in Oconee County.

Dr. Millard S. Brown, Fort Valley; Emory University School of Medicine, Emory University, 1888; aged 65; died at his home on May 8, 1931. He had practiced medicine in Fort Valley and vicinity for more than thirty-five years. At one time Doctor Brown was on the Georgia State Board of Medical Examiners. He had taken a great interest in health work. Surviving him is one son, Sam Brown, of Fort Valley. Funeral services were conducted from the residence by Rev. M. D. Reed.

Dr. A. J. Logan, Plains; aged 84; died at his home on May 12, 1931. He was an outstanding figure in the civic and religious life of his community. Doctor Logan practiced medicine for sixty years; was widely known and held in high esteem by his ac-

quaintances. Surviving him are three sons, Dr. J. C. Logan, Plains; J. E. Logan, Americus; Howard Logan, Plains; three daughters, Mrs. John L. Brown, Montgomery, Ala.; Mrs. A. L. Brown, Macon; Miss Linnie Logan, Atlanta. Funeral services were conducted from the Concord Methodist Church by Rev. J. E. Channell and interment was in the churchyard.

COMMUNICATIONS PASTEURIZED MILK

To the Editor:

With the thought in mind that you and the other physicians of Atlanta might be interested in having some information placed before you regarding the pasteurized milk we are distributing in this city, we have prepared the following figures, based on tests made and submitted by well known physicians here in Atlanta, one figure, as you will note, representing the milk as it comes directly from the producer, and the other after pasteurization.

The averages shown cover a period of about one month.

Average Bacteria Count

Milk before pasteurization.....	66,874 per cc.
Pasteurized milk.....	8,734 per cc.

The results of these tests is most gratifying to us, and it is with pleasure that we submit these figures to you, in the hope that the medical profession in Atlanta will appreciate the efforts Pedigree Dairies are making to serve the citizens of this community with a pure and wholesome product.

PEDIGREE DAIRIES, INC.

Atlanta, Ga., May 11, 1931.

FREE SCHOLARSHIPS SOUTHERN PEDIATRIC SEMINAR

To the Editor:

The Southern Pediatric Seminar has seven scholarships to award to men in Georgia. I wish you would recommend seven men and get it before the men generally so that we can select good material.

D. LESESNE SMITH, M.D., Registrar.

Saluda, North Carolina.
May 12, 1931.

INSURANCE

To the Editor:

After carefully considering the plans offered by the various insurance companies, the Insurance Committee report was adopted by the Medical Association of Georgia, accepting the plan submitted by the Life and Casualty Insurance Company of Tennessee.

This plan provides \$3,000 without medical examination up to age nearest sixty. Those nearest age sixty will be insured for \$1,000 with evidence of insurability.

Each doctor pays his attained age. Rate sheet attached.

In event of permanent disability before age nearest sixty, payments will be made of \$250.00 per month for twelve months.

Premium payment is made on an annual basis and check must accompany application.

Participation of seventy-five per cent (75%) of the members in each district will be required to make the plan effective.

The solicitation will be carried on by a special representative of the company.

Your co-operation will expedite matters and enable us to get the insurance immediately in force.

Let's make this one hundred per cent.

A. G. FORT, M.D., *President.*

DAN Y. SAGE, M.D.,

Co-Chairman Insurance Committee.

Atlanta, Ga., May 18, 1931.

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Age	Annual	Age	Annual
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17	5.57	45	10.02
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20	5.87	48	12.04
21	5.97	49	12.88
22	6.08	50	13.78
23	6.14	51	14.78
24	6.21	52	15.89
25	6.27	53	17.09
26	6.31	54	18.43
27	6.35	55	19.87
28	6.38	56	21.47
29	6.40	57	23.20
30	6.43	58	25.08
31	6.45	59	27.12
32	6.48	60	29.39
33	6.56	61	31.82
34	6.65	62	34.45
35	6.76	63	37.33
36	6.92	64	40.44
37	7.11	65	43.83
38	7.32		
39	7.56		
40	7.85		
41	8.18		
42	8.58		

Annual renewable term, paying attained age each year.

HEALTH PLAY CONTEST

The annual original health play contest, sponsored by the Georgia Tuberculosis and Georgia Home Economics Associations, as a definite contribution to the state-wide health education week in May, as promoted by the Medical Association of Georgia, has come to a most successful close. Eleven plays of high calibre were entered in the contest, which closed May 13th.

For the second year in succession, Dixie Consolidated School, Dixie, Ga., has won the first prize of \$50.00, offered by the Georgia Tuberculosis Association.

A Pup For A Pull, written and produced by the

ninth grade, describes the efforts of a high school class to win a holiday by having 100 per cent dental corrections made. All the pupils secure clean teeth cards except Lamar, who refuses to have a very bad cavity filled. Arguments fail to persuade him, a clean teeth club, that gives picnics and parties, fails, and even his girl has no influence. At last in desperation one of the boys consents to give him his cherished pup if Lamar will only visit a dentist and have his dental work done. Lamar accepts the dog, which he has always wanted, and then shows them his clean teeth card, which he had already obtained, but was holding out on them. So he wins the pup and the class the holiday.

A Grandmother's Granddaughter, written and produced by a biology class of Waycross High School, Waycross, Ga., won the second prize of \$25.00, raised by the Georgia Home Economics Association.

From Hickville to Healthville, written and produced by a ninth grade section of Buford High School, Buford, Ga., won the third prize of \$10.00, given by the Atlanta Tuberculosis Association.

The judges were Mrs. Herbert Alden, a member of the National League of Drama and Pageantry; Miss Leila Bunce, Fulton County Home Economics Supervisor; Dr. T. C. Davison, President of the Fulton County Medical Society.

THE MODIFICATION OF POWDERED MILKS

When physicians are confronted with undependable fresh milk supplies when feeding infants, especially in the summer time, it is well to consider the use of reliable powdered whole milk such as Mead's. Such milk is safe bacteriologically, of standard composition, is easily reliquefied, and is particularly desirable for the mother who takes her baby with her on her vacation. Under these conditions, Dextri-Maltose is the physician's carbohydrate of choice just as it is when fresh cow's milk is employed. The best method to follow is first to restore the powdered milk in the proportion of one ounce of milk to seven ounces of water, and then proceed building up the formula as usual. Please send for our Literature No. 61, which gives practical working formulae for modifying powdered and dried milks, evaporated milk, lactic acid milk, protein milk, and cow's milk. Mead Johnson & Company, Evansville, Ind., U. S. A.

COMBINED USE OF DIGITALIS BODIES AND EPHEDRINE HYDROCHLORIDE

Carl A. Johnson and N. C. Gilbert, Chicago (*Jour. A. M. A.*, May 16, 1931), describe experiments that they performed on unanesthetized dogs to determine whether the combined effect of digitalis bodies with ephedrine has any untoward effects. On the basis of the results obtained and from certain clinical observations, they conclude that undesirable or even dangerous effects are likely to occur. When digitalis is being used in the treatment of cardiac conditions, ephedrine should not be used or else should be used with extreme caution.

Curtice Rosser, Dallas, Texas (*Jour. A. M. A.*, May 23, 1931), has seen twenty-four persons in the past five years whose rectal complaint dated from the injection of solutions of phenol in oil into hemorrhoidal plexuses or under the rectal mucosa. He believes that partial occlusion and rigidity of the lower part of the rectum is present in many individuals who have received phenol-oil rectal injections. Definite stricture is not uncommon. The elimination of oil as a carrier or the substitution of some other nonfatty chemical is suggested to avoid this complication of the non-surgical treatment of hemorrhoids.

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Volume XLVII, Page 1488.

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of boiled
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**S. M. A. is simple to prepare
... and requires no modification**

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BALTIMORE, MARYLAND

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DEVOTED TO THE WELFARE OF THE MEDICAL PROFESSION OF GEORGIA
PUBLISHED MONTHLY under direction of the Council

Volume XX

July, 1931

Number 7

SCIENTIFIC MEDICINE AND THE MENACE OF THE MEDICAL UNDERWORLD*

CHAS. M. ROSSER, M.D.
Dallas, Texas

Mr. President, Ladies and Gentlemen:

I am deeply appreciative of the polite invitation to be guest at this the eighty-second annual convention of the Medical Association of Georgia and to have a modest part in the program of this good hour. I have enjoyed immensely your scientific deliberations and to have the privilege of speaking from a platform graced by Dr. William Gerry Morgan, President of the American Medical Association, adds an honor which I shall cherish in grateful remembrance of this occasion.

Myself a native of your state, I share with you a pardonable pride in its traditions and the noble history it has written, none the less impressive of which has to do with matters pertaining to the science and art of medicine. It would be an interesting but trite recitation of that which is of general knowledge should we call the roll of the illustrious pioneers in medical progress, assigning to each his well earned place upon the scroll of fame, yet when at any time this record is examined, few names will appear above those of your predecessors who occupied the forefront in the march of human healing. The medical men of this state have made vast contributions to make illustrious the name of the fair State of Georgia and in this respect surely their reputations and usefulness will have appropriate guarantee.

The patriotic personnel composing the membership of the Medical Association of Georgia has this priceless heritage and right worthily do you uphold the banner committed to your hands. It will, however, not

be possible for the medical profession of Georgia, or any other state, to continue development which is due upon its own account or that of the public for the public good unless the entrance to the profession shall be carefully guarded and, further, the laws regulating the practice of medicine must provide for removal of the unfit when judicially so determined.

Here and there you are given the sympathetic support of conscientious, clean-minded and capable practitioners who have not identified themselves by obtaining and maintaining membership in county, state and national medical organizations. These should be encouraged to overcome indifference and inconvenience, such as may be, not only for the benefit they may give and gain, but in the interest of a clientele which should have the best there is in scientific thought and professional practice.

As I am informed, the laws of your State admit to examination by separate boards the several pseudo-scientific medical-pathies and the medical cults of various kinds and character, and in certain cases require no examination as a prerequisite for following the business of treating the sick. Multiple examining boards mean multiple standards and multiple standards are little, if any, better than no standard at all. Where there are high and low standards, the lowest standard always prevails. Such a situation should not be tolerated and you owe it to yourselves, as to the people it is the privilege of the medical profession to serve, to urge upon your legislature to meet its undeniable responsibility.

We have in Texas, as has New York, Illinois and other progressive States in this particular, what may be termed the "Basic Science Law." It provides for only one Board of Examiners, this to be appointed by the Governor and, in a spirit of evident fairness,

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representatives of the several schools or systems of medicine, whose courses of study are high enough to justify scientific and legal recognition, are placed thereon and in this appointment it is prescribed that no school or system of medicine shall have a majority representation upon the Board of Examiners. It is required that such schools or systems of medicine shall in the selection of their student body admit only those who have adequate academic preparation, and that they shall be faithfully taught the basic sciences recognized everywhere as indispensable knowledge to be attained, making it possible for such graduates to become safe advisors of the people and skillful practitioners in combating diseases.

These basic sciences are: Anatomy (body structure), Physiology (body functions), Pathology (disease changes), Diagnosis (determining the trouble), Chemistry (ultimate construction and reactions under varied conditions), Histology (minute anatomy), Hygiene (health laws), Gynecology (female diseases), Obstetrics (child birth), Surgery (mechanical repair), Medical Jurisprudence (legal medicine).

This standard is adopted for the safety of the sick; it must not be lowered to accommodate mediocre, untrained or single-track minds.

No Question on Medicine or Methods

The board asks no questions on *Materia Medica*, drugs, nor as to any method or system of treatment. The examination is on the above enumerated fundamental sciences only, subjects basic to all rational systems or methods of treatment, so known and acknowledged by informed and conscientious men everywhere, irrespective of methods preferred in practice.

With a working knowledge of these sciences, a dependable judgment is possible, otherwise the doctor could not determine what treatment was best or when any particular method of treatment might help or injure.

Cheerful Obedience—Defiant Violation

As a rule there is cheerful compliance on the part of graduates from reputable medical colleges, institutions that have raised their standard to meet the requirements of the Basic Science Law. This whether of the

regular, homeopathic, eclectic, physiomedic or osteopathic school of medicine. On the contrary, quack cancer fakirs, pseudo spiritual hypnotists, magnetic healers, nature doctors, chiropractors and cultists of like character would ignore the board almost without exception and undertake the treatment of the sick without learning or license and, therefore, must face prosecution in the courts.

Principal Offenders

The two cults which will most generally resist these necessary regulations whenever in force are the Christian Scientist, or rather the professional "Healers" among them, who claim *that there is no such thing as disease, and yet charge for treating them*, and Chiropractors, who admit *that people do get sick, but assert that all diseases are caused by faulty alignment of one or more of the spinal vertebrae*, and that all cures come from readjustment. These cults have nothing in common, except their antagonism to righteous regulation and their disbelief in the proven facts of science.

Christian Science

But for the fact that through the seductive influence of the Christian Science theory, and the salesmanship feature of the Chiropractic curriculum, much popular notice and some popular approval has been attracted to these cults, no individual mention would be made of them. Many well-meaning and apparently intelligent persons have been deluded by Christian Science. Many of these are among our very best people. They are our neighbors and friends, and since they hold to the doctrine which this faith so insidiously inculcates into the minds of its followers, they are apt to be sensitive concerning any critical reference to what is assumed to be their religion. The fact is, that so far as the cult shall claim to be Christian in character, independent of Science, there should arise no issue. Had it originated and remained in the domain of the spiritual, no comment lacking pleasing consideration would be made, but the term "Christian," which contains the carrying power of the cult, has been associated with the term "Science," an act which may be denominated "assumption" or "presumption," at will.

For the purpose of this discussion, we separate Christian Science as a devotional exercise, and Christian Science as a secular calling. As a devotional exercise and a religion, it is a personal and private prerogative of its devotees and is entitled to the same guarantee of religious liberty which the government universally accords, but that guarantee is accompanied by another, equally well-established, that no religious society shall be given privileges or protection peculiar to itself.

The theory of the medical practice act is that Christian Science as a religious denomination has appropriate immunity, but that Christian Science as a secular calling is the people's business, and since it has insinuated itself as an offered substitute for the science of medicine in the treatment of disease, it is subject to legislative inquiry and regulation. Therefore, it should not and cannot escape searching analysis.

Christian Scientists call illness "error". It is lamentable that their teachings, through literature and other methods of propaganda, is the fatal error that it is. It is particularly unfortunate and deplorable that the results which follow do not fall alone upon individuals primarily responsible.

Chiropractors Conspicuous Offenders

Because of numbers and the fact of organizing itself to resist the fair, the necessary, non-discriminating and righteous regulations prescribed by the state, Chiropractic has elected to occupy the spotlight which is being turned upon the medical underworld.

Instead of raising its own level as others have done to meet the standard determined by the state, it flaunts the law and seeks a low standard for its convenience. Rather than become competent to pass a fair examination on fundamental sciences before a composite board, it wants a personal, private board to examine itself on its own particular method of treatment, which system of treatment it boldly asserts is independent of such sciences. Refusing to qualify, yet attempting to follow the business of treating sick citizens, they ask public sympathy, and year after year petition the legislature of Texas for a sub-standard separate board for their own use and benefit. To the credit of our last legis-

lature not a member of the Health Committee in either house could be induced to sponsor the bill.

The practice of medicine is the treatment of disease. Medicine is not necessarily a powder, pill or liquid, as commonly understood. Spinal manipulations or attempted adjustment, advice as to diet, exercise, climate, electricity, x-ray and other agents, are remedies, just as are prescriptions for drugs and surgical operations.

There is no law against chiropractic or any other form of treatment by any legally qualified persons, but the Basic Science law prohibits all unqualified and unlicensed persons from treating sick people as a business or calling by this or any other method or system. At best the human mind is fallible. Disappointing results are frequent enough, however competent the training. Conscience and skill cannot be guaranteed, but the door of the sick room can and must be closed against wilful ignorance.

The state law should require proof that each practitioner is reasonably competent. To do this they must be examined by the State—sick people cannot do this for themselves. If the State of Georgia would meet its obligations in this matter, the Basic Science Law should be enacted and rigidly enforced, otherwise it will continue to be an accomplice in the crime of quackery and to that extent responsible for the consequences of negligent homicide.

In so far as Christian Science inculcates patience, tolerance and self-serenity, it is altruistic and helpful. The principles underlying these attributes are not subject to patent, nor can they be pre-empted. They appeal to our better sentiments and are inseparable from the best philosophy. Whatever there is of value in them is in reach of all persons who are normally adjusted, and the wise physician makes use of mental suggestion every day.

Fear disturbs equilibrium; doubt encourages disaster. The troubled mind is an enemy to sleep; sleep is nature's method of repair. Distress weakens appetite and lessens the function of digestion, which must precede assimilation, and assimilation is essential to preservation of strength. There is some truth

in all error that floats, and this is what there is of truth in Christian Science.

I have no objection to prayer. I wish I had the advocate with the Father that some people claim. Having been reared in a minister's home, and having enjoyed throughout life the atmosphere of rational religion, I commend prayer as a devotional exercise, in all reverence, and when Christian Scientists or others lift their souls in prayer and supplication to the Almighty, in a spirit of devotion, I bow my head in the same spirit, however unworthily. But when they or others prostitute such prayer at the behest of avarice for personal gain, I must be excused if I lose interest in them and their prayer. Religious prayer is one thing, commercialized prayer quite another, one which public sentiment should not condone nor the state countenance, and a law which prohibits the treatment of disease for pay by unlicensed practitioners must apply to Christian Science healers just as to other practitioners.

Chiropractic and Other Cults

The cult Chiropractic is approached in an entirely different attitude. It has neither the grace of veneer nor the glamor of mysticism. Its pretenses do not include pride, and its ignorance of all facts is easily discovered. Having neither that idealism which induces men to deserve as well as to desire, nor that educated intelligence which inspires to consecrated purpose, nor that industry which is necessary for the serious pursuit which is called for in the scientific world, they route themselves by indecent haste through a near cut to professional status, and hold themselves out to be "Doctors."

Chiropractors claim that all diseases are caused by dislocation at a spinal juncture, and that the better treatment of all cases lies in readjustment. How utterly ridiculous! This dogma denies the necessity for diagnosis, upon the ground that no matter what the disorder, the same treatment will apply. Denying that disease-producing germs influence health, they resent the suggestion that bacteriology is scientific and true, so neglect its study. Assuming that all conditions are easily curable by their pet methods, they avoid post-mortem investigation necessary to know path-

ology. In short, no knowledge is of importance to them except how to twist and where to bear down.

The purchaser of a "gold brick" admits himself a fool. He is a marvel of wisdom compared to one who refuses to reason regarding matters pertaining to his health and the prolongation of his life.

Everybody knows that the malarial parasite induces malaria; that the typhoid bacillus causes typhoid fever; that tubercular bacilli must pass into some part of our anatomy before consumption takes hold; that diphtheria is caused by the diphtheritic germ; that lockjaw is caused by the germ of tetanus, and so through a long list of veritable diseases and veritable causation, calling for veritable cures.

Men now living remember when yellow fever sacrificed many lives throughout our Southland, leaving the people panic-stricken. Cholera at one time destroyed the inhabitants of whole islands, making it necessary to repopulate by immigration. Cuba and other West Indian islands were once unsafe places in which to live, because endemic diseases kept civilization away. The Panama Zone, once prohibitive from the same cause, is now a garden spot in civilization.

Before the discovery of antitoxin, the larger percentage of all children stricken with diphtheria died within a few days. The proper administration of that remedy today restores 98 per cent to health and happiness.

During the war with Spain, typhoid fever killed more American soldiers than were destroyed by the bullets of the enemy. In the meantime vaccination for typhoid has been discovered, and by its employment during the greatest war of all history there was not a serious outbreak of typhoid in any American camp. Scarlet fever is now subject to control. Smallpox has, by vaccination, long been rendered a needless affliction, lockjaw and hydrophobia, once so terrible, are prevented with as much certainty as they were once prone to result in death. This is but an imperfect summary of the immeasurable blessings brought to humanity by the science of medicine and the literature of the world will be searched in vain to find a contribution to the public good from a single infidel

opponent of the medical profession as represented here today.

There is but one medical profession. It ignores all dogmas, refuses all limitations and leaves to the educated physician the application of his judgment as to diagnosis, the selection of remedies and the methods for their employment. It follows the post-mortem knife as an intelligent interpreter, discovers the changes consequent to organic disease, thus dragging from the realm of death imperial weapons to defend the living. Exclusivism, whether from superstition, prejudice, ignorance or as a cater to perverted sentiment can have no place because dangerous and never justified.

Firmly fixed upon this ample foundation, the truly scientific medical profession pre-occupies the medical field and invites to its honorable friendship and alliance sincere and intelligent practitioners.

There is but one medical profession! It is for the healing of the people. Whether as in morgue or laboratory it seeks for fundamental truth, whether in hospital or sanatoria, in the hut of destitution or in the mansion where men of millions live, its ideals, ambitions and endeavors are ever the same: to prevent disease, to relieve suffering, to avoid disability and where possible lengthen out the thread of life.

And the glory of the profession is not so much in its men of brilliant mark as in the prompt uniformity with which scientific discoveries and clinical observations become common property and thus available to the suffering sick wherever found.

In a knowledge of responsibilities of such serious import, and of possibilities so far reaching and obligatory, the profession stands with uncovered head but with heart that is proudly brave. Humbled in the presence of its stupendous task, yet standing in the light for all of good it may gain and give, it leads no clandestine life, but meets its duties daily with unflinching faithfulness—a universal friend.

In medicine there are no lords nor house of lords, no monarchies nor monasteries, no dignitaries nor diplomats, no caste, unsupported by character, *but every man at once to be, a servant and a king!*

LEGALIZED PREVENTION OF REPRODUCTION IN THE UNFIT*

E. C. THRASH,† M.D.
Atlanta

Nations since the dawn of civilization have begun with an infantile setting and have grown in accordance with environments and natural evolutionary forces until intelligence and sociological factors began to interfere. Men and women in the beginning of progress toward civilization grow sturdy and strong, developing strength physically and mentally by aggressiveness against all the enemies of upward evolutionary progress. The weak are in the main overcome by the strong and prevented by forces and selection from procreating. When a point is reached in the progress of a people where sociology begins to interfere in the way of salvaging and conserving the weak despite natural laws, the weaker beings begin to compete with the stronger until a point may be reached where progress upward not only ceases but retrogression begins. This effort at beneficence is one of the chief reasons why fossilated and bleached bones of civilization lie scattered over Asia, Northern Africa and Southwest Europe, and the retrogression of the newer nations, which retrogression is already knocking at the back door of ours, the newest, as we are showing evidence everywhere of decadence. Switzerland and Scandinavia are probably the best living examples of what clean methods of living will accomplish. Feeble-mindedness, degeneracies, criminality and diseases get so thoroughly intermingled and become such a part of the constituents of a nation that retrogression ensues, the nation itself becomes degenerate and finally crumbles and falls. If the minds of the people would conform somewhat to natural laws by arranging for and planning selective breeding of strong stock there would be no reason why a nation should not live forever and continue to grow stronger.

It would be folly to say that eugenic breeding could correct all individual, familial, and racial degeneracies. Our knowledge of how

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†Deceased.

to breed correctly is so limited that if we were given entire freedom to handle eugenics without restraint it would be quite a long while before perfection could even be approached. We cannot go forward, however, until we make a beginning, and the more intelligent certainly should make an effort to raise the standard of birth for the benefit of the individual, the family, and the country.

Legalized eugenic birth control has been considered in the past from the standpoint of punishment, improvement of health of the individual, and the prevention of birth of defectives. The utilization of this means as a punishment has been practically discarded. It should not be thought of as a punitive measure. Its sphere as a therapeutic agent is extremely limited, so this thesis will be directed largely toward the prevention of reproduction of defectives.

Birth control as a general proposition has recently aroused much interest. This is a medical thesis and will not deal in any wise with general birth control except to say that the higher the degree of intelligence in a race the fewer are the births, and as the scale goes downward births increase until in the lower strata they are born promiscuously both in and out of wedlock. This tendency itself leads to the lowering of the constituents of a people, mentally, physically, and morally. The field broadens so in this direction however that its management must be left in the hands of the great mass of interested sociologists in all walks of life. We shall deal here only with reproduction in those who are unfit to procreate.

Following is an outline of the Mendelian laws of heredity, which is given in order that a proper grasp of what the writer is attempting to present may be had. According to these laws:

1. Two parents who have the same hereditary defects will produce these same defects in all of their children. In other words, two parents with exactly the same criminal tendencies or the same mental defects, will procreate these in every child.

2. If one parent is normal and the other has a hereditary defect and should this normal parent have latent hereditary defects from

ancestors, half the children of these two people, that is, one with a frank defect and the other with a latent one, will produce half of their children defective and half apparently normal, but these normal ones may transmit their defects to progeny.

3. If one parent is entirely normal without latent hereditary defects and the other parent has an hereditary defect but apparently normal himself, all of the children may be normal but these apparently normal children will be capable of transmitting their inherent defects to their progeny.

4. If two parents are apparently normal but each has an inherited defect one-fourth of the children will be normal and will not transmit the defect, one-half will be normal but may transmit the inherited tendency and the remaining one-fourth will be defective.

5. Two parents, one without defective inheritance and the other possessing this trait will have all children apparently normal but one-half of them will be capable of transmitting this inherited taint. Where both parents are normal without inherited taint, all the children will be normal and none capable of transmitting defective tendencies.

These laws have been verified by students of inheritance since Mendel made his observations and they have been unanimously verified. This gives a working basis that will aid us in an effort to solve hereditary problems.

Monetary losses from procreating criminals, mental defectives and degenerates are stupendous but these losses are insignificant when compared to the sorrows and heartaches of families, the sufferings of individuals and the decadence of nations. All criminality cannot, nor can all insanity, be traced to heredity, but students in the science of penology and psychiatry can trace the hereditary moiety with a degree of accuracy that gives a satisfactory working basis. Sentimentality and ignorance are the greatest obstacles in the progress of eugenic breeding. The outstanding fetishism to overcome is that such a procedure would be interfering with God's plan. Would it be His wish that you leave the noisome weeds to crowd out the roses or the predatory birds to prey upon the songsters?

His reaction to all His creatures is the same.

There are many illustrations in the records of this science and in literature that show the results of inbreeding criminals and mental defectives. The Kalikak family is a striking one. The original father begot an illegitimate son by a feeble-minded woman. Four hundred and eighty offsprings were traced from this illegitimate procreation of which only forty-six were normal; all of the others were various types of degenerates. The same man subsequently married a normal woman from whom in six generations were descended four hundred and ninety-six offsprings, only one of whom was known to be abnormal. There were all types of criminality and feeble-mindedness in the former generations and all kinds of successful tradesmen, teachers, preachers, lawyers, judges, and other highly qualified citizenship from the latter. The Jukes family in six generations produced twelve hundred defectives. The Nam family showed ninety per cent of the offspring to be feeble-minded. Many others might be mentioned, and each of these families cost its State from one to five million dollars.

Ohio in its published report states that it is spending five million dollars annually to take care of its defectives in public institutions and this report estimates that the world is paying five billion dollars annually to hospitalize mental defectives alone, to say nothing of the cost of prosecuting and caring for criminals. We are making no constructive effort to reduce the sum of billions of dollars that is spent by all the countries of the world in protecting themselves against all forms of crime and it is known that the greater number of these criminals and especially the more heinous types inherit these malicious tendencies.

What is to be done? Means should be devised and laws instituted to prohibit the birth of as many weaklings as is practicable. Sentiment must be set aside for the health, happiness, and other benefits that the higher types of the race would enjoy by checking the reproduction of types that can get no pleasure out of living themselves and are a burden to all those with whom they make contact. A slight operation associated with no danger will sterilize either of the sexes,

that is vasectomy on the males and salpingectomy upon females. The technique of this operation is familiar to all surgeons and there would be no advantage in outlining such a procedure. Suffice it to say that the procedure does not interfere in any wise with various vocations, social relations or sexuality. There are no gland structures removed or affected which would have any bearing upon one's life from a physical, psychological or physiological standpoint. In fact, nothing is disturbed in a person's life except the spermatozooids of the male and the ovule of the female are blocked off so that contact cannot be made and reproduction is rendered impossible. It has been argued that such a procedure would encourage promiscuousness of the sexes but careful observation by Popenoe of California has shown that this is not the case and that sex hygiene has been improved.

There are twenty-four states in the union which have adopted laws authorizing sterilization. These states are Arizona, California, Connecticut, Delaware, Idaho, Iowa, Kansas, Maine, Michigan, Minnesota, Mississippi, Montana, Nebraska, New Hampshire, North Dakota, Oklahoma, Oregon and South Dakota.

California, under careful observations and studies of Gosney and Popenoe, has made further progress in this direction than any other state in the Union. This state has sterilized at present around seven thousand defectives. Mr. Popenoe has checked these carefully, made observations, and has become assured that it is the sane course to pursue in handling these types. Popenoe's opinion is probably more valuable on account of his extensive research work than any other man in the union and he has given inestimable service in this direction. He has been financed in this service by Mr. Gosney. Popenoe's careful investigations have shown that there are apparently ten million mental defectives in the United States, many of these are not in institutions but they are all potentially institutional cases and one can easily see what an outlay it requires to care for such a horde. The I. Q. tests which have been made in the schools show that between four and five per cent of the children of school age are below

seventy and those below this percentage are either greatly handicapped or are totally unable to earn a living and the majority of them become criminals and degenerates. Many of these are the offspring of parents who should have been sterilized.

A law should be enacted in this state whereby every confirmed criminal should be sterilized and also every mental defective where it can be shown there is a hereditary tendency to feeble-mindedness. Every male idiot should be either completely unsexed or sterilized, depending upon whether or not he is a menace to society on account of attacks he might make upon unprotected persons. It might not be well to enact a law enforcing sterilization of syphilitics, but each individual should have the importance of such a procedure stressed upon him and insist that it be done at his own volition for the protection of his wife or vice-versa, his offspring and society generally. It should be made compulsory in paretics. With all the other forces brought to bear in an effort to control this disease, it cannot be handled successfully without checking the procreation of syphilitics. Tuberculous females should be sterilized for their own protection and to prevent the breeding of children that would have to be reared in a tuberculous atmosphere.

DISCUSSION OF PAPER OF DR. THRASH

Dr. James N. Brawner, Atlanta, Ga.—The very accurate reasoning given by Dr. Thrash in his paper on sterilization of the insane, criminals, and unfit, should receive careful attention, not only by physicians, but by the sociologists, criminologists, and legislators. No doubt, in a way, we are dealing with a ticklish problem when we commence to talk about sterilizing people who are not confined to institutions.

I think it would be very easy for the State to pass a law for the purpose of sterilizing the insane, and especially the chronic insane who are now confined to the State asylums or penitentiaries. I think, however, that a law should be passed to deal with borderline cases who are likely to have defective offspring. Primitive life sees that the weaklings, defectives and unfit are eliminated and the race is thus kept strong and healthy, but as we become more civilized and sympathy and sentimentality for the defectives are increased, such individuals are more likely to live and transmit their defectiveness to their offspring.

One of our great philosophers in discussing this matter said, that although it seems hard, society makes a mistake in fostering the weak. He also said that "a nation which fosters and cares for the good-

for-nothings will sooner or later find itself a good-for-nothing nation." Whether this will be true or not, I do not know, but it is a matter that should be taken into consideration. I think there is no question but that every State should pass a law providing that their criminals and those with a tendency to insanity should be sterilized.

Dr. William R. Dancy, Savannah, Ga.—A very vital subject has just been presented for our most careful consideration. It deserves our intense thought and most able reasoning, with an abiding sense of justice to our fellow-man of today and of the future, of the individual defectives on the one hand and of the development of better future generations on the other. To the medical minds which have given this subject thought and consideration, it appears to me that most of them agree that satisfactory laws should be enacted to prevent the propagation, the reproduction, of the mentally unfit. Such laws must be tempered with justice and fairness, and made free from abuse; yet they must be far-reaching in the effect of preventing reproduction of certain types. It would appear that asexualization is the means of choice, isolation being expensive and impracticable.

There are over twenty states which have effective laws, patterned more or less after those of California, whose State institutions furnish the most satisfactory statistics on asexualization and general working of the law. California laws provide for the asexualization of the unfit in the State institutions, subject to the decision of the medical board. The permanently insane, who must be perpetually confined to the institution, are not sterilized; those patients who improve to such an extent that they are let out on probation are sterilized, and other cases, as epilepsy, dementia praecox, melancholia, and so forth, are generally considered cases for asexualization. This law, however, applies only to those admitted to institutions. It leaves a vast multitude of defectives free, who should be controlled and who now are not reached.

Those considered as being a menace to future generations by reproduction, whom we feel should be isolated or sterilized are: (1) The permanently insane; (2) the transient or mildly insane; (3) the feeble-minded; (4) the epileptic and allied afflictions.

The permanently insane, being confined, do not need asexualization. The transient insane and the mildly insane, being allowed freedom, will reproduce their kind if not sterilized. Without much argument, I am sure that you agree that these individuals should not be allowed to reproduce and, hence, should be sterilized. The fourth class, including epileptics and allied states, although of higher intelligence, should be prevented from reproducing their taint and the most practical method is sterilization. I feel that this should be done.

The feeble-minded of class three deserve our sympathy. I shall recite one item from the literature which I am sure will convince you what should be done with this class of individuals who have no morals, no decency, no uplift, and low intelligence, a coefficient of 30 to 60. A consideration of the

record of one such family (Psychiatric Quarterly, Vol. 4, No. 3, July, 1930) will at once show the inadequate way in which social problems of this kind have been dealt with heretofore. A mother and two children were brought to the clinic for social recommendations, because of inadequate supervision over the children, inability to maintain a home, etc. They had depended on community support for ten years, and the children had even been sent to beg from various charitable organizations. The father, aged 46, would not work, in spite of frequent arrests for nonsupport, with jail sentences. He was known to be sexually promiscuous, and was said to be responsible for the paternity of a number of illegitimate children besides the six living children in his own family. He was alcoholic. When examined psychologically he was found to be a low-grade moron, having an intelligence quotient of 57.

His own hereditary background is of interest. His father was a "loafer," weakminded and alcoholic. His mother also was weakminded and considered wicked for allowing her 18-year-old daughter and 20-year-old son to sleep together, which resulted in their procreating an incestuously illegitimate child. His mother, aged 41, had an illegitimate child at the age of 20 and a second one at the age of 22, and because of promiscuity did not know the paternity. Her own father had little education and was alcoholic. Her mother had a "fair education." There were twelve other siblings in her family, one sister having an illegitimate child before she was married at 21. In the psychological examination the mother attained an intelligence quotient of 56, placing her in the low-grade moron group. It would appear that sterilization of this woman before she began to procreate would have been a boon to the community, both socially and economically.

Two of these children were brought to the clinic as "neglected children." The older one, a girl aged 10, had been subjected to rape at the age of 8½ by a man aged 52, contracting gonorrhea as the result. Although this may seem shocking at first, it is no more than might have been anticipated, considering the fact that her mentally defective parents often carried out sexual relations in her presence, and that she was but a mid-grade moron, with an intelligence quotient of 63. Should this child be allowed to perpetuate the type of record her ancestors have made, or should sterilization be used as a means of checking the growth of this family tree?

The other child, a girl aged 8, was still in the first grade. Time will tell whether her intelligence level will improve slightly or gradually decrease. The latter is more likely, considering all the factors in her social background. Her intelligence quotient was 73, and she was therefore classifiable as a borderline defective.

Of the other four children, one lived with an aunt in a near-by city, a boy aged 12, now only in the fifth grade. A girl, aged 5, living with an uncle in a more remote city, was in kindergarten. A boy, aged 3, had been placed in an orphanage; he also was

mentally retarded. The fourth child died at the age of 6, of cholera infantum. Information about the mother's two illegitimate children was not available.

It is quite within the realm of expectancy that of this group of children having such a faulty environment (mentally defective parents), and being of poor mental caliber themselves, a considerable portion will make poor social and economic adjustment in life, and some will eventually have to be institutionalized.

I would mention that modern sterilization is not a mutilating operation. In the male, the vas is tied and cut; in the female, through an illuminated speculum, the orifices of the tubes into the fundus of the uterus are cauterized, so that a cicatrix forms and obliterates the lumen. The nerve supply and sensation are not destroyed.

As an economic problem, asexualization would greatly reduce the inmates of the State institutions in this generation, and even more in future generations. The State of Minnesota alone paid out \$9,000,000 last year to State institutions for the mentally unfit, and this year has appropriated \$11,000,000 for that purpose.

In conclusion, asexualization (sterilization) of the mentally unfit is a wise, efficient and necessary procedure, if properly guarded by efficient laws.

Dr. Roger C. Swint, Milledgeville, Ga.—I wish to thank Dr. Thrash for presenting this paper. I consider the subject one of very great importance. I do not suppose anyone comes more intimately in contact with this problem than I do, particularly with the care of the insane. We have in the hospital 5,460 patients at this time. We discharge annually 700 or 800 patients, and of these individuals 50 per cent are less than forty years of age. We are frequently confronted with the problem of the birth of children with patients who have returned to the hospital from discharge or furlough. There is no doubt in my mind but that defective germ plasm of insane persons has been scattered throughout the State, and if we keep in mind the figures given by expert statisticians there are around 100,000 persons in the State of Georgia who are more or less maladjusted, and there are around 7,000 who are certified insane. Society does not pay much attention to race betterment, and these ideas and teachings must emanate from the physicians. I think it would be a fine thing if this organization would use some common sense about this matter, and take some definite action in regard to it.

Dr. T. F. Abercrombie, Atlanta, Ga.—I think Dr. Thrash has brought to us a very important phase of public health work, or preventive medicine. In 1929 Dr. Pace introduced a bill, to which Dr. Thrash referred. There was strong opposition and it never got by the committee. He is enthusiastically supporting that bill again, and if he is permitted to return to the Legislature he will introduce that same bill. It will meet with the same opposition. If it meets with any success at all it will be because such men as you get behind it in your home towns.

As to the matter of necessity for this sort of thing, you know the State has a feeble-minded school. We

had one boy there whom we kept for a long time. He finally left the institution and we lost trace of him but about six months ago he walked into my office and had with him a wife, and that woman had a child in her arms. They were walking the streets, not able to make a living. A few days later I met them on the road. He is not of sufficient mental level to make a living for his family, and there are many such cases. I wish to make the point that if such legislation is ever passed it will be due to such men as you getting behind it in your home counties.

Dr. J. L. Campbell, Atlanta, Ga.—I have been interested in the subject under discussion for many years. Just before the regular session of the 1929 Legislature I read a paper before the Woman's Auxiliary of the Fulton County Medical Society, in which I discussed the relation of heredity to mental and physical defects and advocated the sterilization of hereditary criminals and mental and moral derelicts. The paper was not formally approved, but there was a large sentiment in favor of some action being taken. Later, I was invited to read the same paper before the Methodist Ministers' Association of Atlanta. They discussed it freely and promised their support, should measures be taken to secure adequate legislation.

Dr. Thrash mentioned the theological aspect of the subject: I am convinced that all broadminded protestant ministers and laymen will favor the proper legislation, for we all realize that our Creator has made immutable laws from which He does not deviate and, as these laws have been perverted by human mistakes, we must use human intellect to correct them. He does nothing except through human instrumentality. God has given us intellect and we must use it for the betterment of the race which has reached its present plight through sentimental and emotional errors. As these are likely to continue, we must use the means at hand to prevent the consequences. We all know that where the restraining influence of the higher moral faculties fail to function, the animal instincts of the human race so predominate that individuals of the lowered mental class procreate much faster than those with higher instincts.

A bill properly drawn and properly safeguarded would receive widespread support and, I have no doubt, could be passed by our next Legislature.

Dr. E. C. Thrash, Atlanta, Ga. (closing).—As to mental defectives, there has been much said this morning as to whether the mind is an organ or not. Whatever it is, it is the most highly endowed attribute we possess. It is, from the physiological standpoint, figuratively speaking a secretion of an organ that is the result of the action of the brain cells and mind activities are really an indication as to whether the brain cells are functioning properly.

I wish to thank you for your discussion and I hope good will come from it.

The eighty-third annual session of the Association will be held at Savannah, May 10, 11, 12, 13, 1932.

A DISCUSSION OF HYPERTENSION*

STEVE P. KENYON, M.D.

Dawson

As it behooves the commercial man to take stock annually to ascertain if he is a winner or loser in the business world, also does it behoove us as doctors occasionally to list our liabilities and assets, in order to know our rating in the world of disease and sickness.

The four most prominent liabilities in the medical world are cancer, tuberculosis, heart disease and hypertension. In the United States the latter cause more deaths than cancer and tuberculosis, and although no accurate record is available now, I believe you will agree with me in the statement, that in this section, hypertension and its sequelae cause more fatalities than these two, plus rheumatic heart disease. It is appalling to witness the toll that this disease yearly reaps, in spite of all our efforts to check it.

For the last two and a half decades, the most learned men of the world have given their best study and work in their efforts to discover the secret of hypertension, both as to etiology and treatment. As a result we have a mystic maze of intelligent theories and pet treatments, but we who have to scratch our heads daily over each new case, must admit that the incidence of essential hypertension is steadily but surely increasing. And by essential hypertension, I mean a high blood pressure that is not caused by nephritis, urinary obstruction, aortic insufficiency, pregnancy, nor hyperthyroidism. Hypertension heads the list of subjects discussed in our journals and periodicals the world over, and rightfully so, because a subject so fatal, yet so obscure, needs all the scrutiny and study possible. In spite of this mighty effort, we must face these facts. Hypertension causes 140,000 deaths annually in the United States. The cause is unknown. There is no cure. Yet, our patients must be treated, we must give them the benefit of the best that is known today. So, in this paper I will endeavor to summarize briefly the present status of hypertension.

*Read before the Medical Association of Georgia, Atlanta, Georgia, May 13, 1931.

Our criterion in the clinical practice of medicine is that an arterial tension over normal means hypertension. It seems rational that there are some persons who normally have a pressure reading above the average. Their pressure may remain high for years with no apparent increase. They should not be classified as hyperesis. Mosenthal defines essential hypertension, the hyperpesia of Albutt, the hypertensive cardio-vascular disease of Janeway, as "a disease of unknown etiology characterized by a persistent and increasing elevation of both systolic and diastolic blood pressure, the rise in blood pressure entailing secondary changes in the heart, cerebral arteries, and, less commonly, the kidneys, any of which may prove fatal." A systolic blood pressure of 150 under fifty years of age, and 160 over fifty years of age, should be investigated. They are potential cases of hypertension, and, if they show a steady and progressive rise, they should be treated as such. Some men claim that a systolic pressure of 170 and a diastolic pressure of 100 are the upper readings which do not entail any secondary damage to the heart, vascular system and kidneys. I feel sure from clinical experience that many cases already have an hypertrophied and dilated left heart, before the readings have reached those figures. In this respect, it is the diastolic pressure that is the real gauge of the damage being done to the heart and the true prognosticator of the longevity of each individual case. While the systolic pressure represents largely the peripheral resistance, the lower reading represents the work that the heart must do to force open the aortic valve. Some physician has wisely said that "if the diastolic pressure is under 90, it matters not what the systolic reading may be." It is agreed by practically all students of hypertension, that a diastolic reading of 130 or over, means death in two years. Dr. Stewart R. Roberts aptly classifies two types of essential hypertension in point of degree.

First: A mild type that lasts a long time, with no symptoms. As he calls it, "a peaceful hypertension" under which we may put the hypertensions of obesity, the menopause, the rises of prolonged worry and stress, of over-eating, tobacco and other such causes.

Second: A "malignant type," severe and rapid, in which the readings are higher than the glomerulo-nephritic type, but with a termination similar to that of acute nephritis.

Etiology—Probably the first real work on the subject of hypertension was done by Albutt in 1900, Cushing in 1901, and Richard Cabot in 1904. It was Cushing, who first drew the conclusion that an anemia of the vasomotor center in the medulla caused a rise in the systolic pressure. Since that time each new theory, with its enthusiastic proponents, has complicated the subject and left the clinician's mind dazed, as to where to begin or what to do. Allen believes that an excess of proteins and a faulty metabolism of sodium chloride causes hypertension. Numerous authorities consider heredity the primary factor, while Moschowitz believes that it occurs in the individual who is the "antithesis of the child" plus the proper familial environmental influences, and with the modern psychic influences as the activator. The same author also lists endocrine disturbances, congenital peripheral resistance and finally a general disease of the capillaries as probable causes. Among the first causes given for hypertension was that it was the result of vascular changes in the kidney and a generalized arteriosclerosis, but it is now generally accepted that hypertension is the primary condition, and the two conditions listed above are just a part of the picture of a general systemic vasoconstriction. Many writers attribute hypertension to a vasomotor irritability. In fact, Dr. Lintz, before the Interstate Post-Graduate Clinics, said: "A spasm of the arterio-capillary bed produced by the vasomotor center in the medulla is the most universally accepted theory as to the production of hypertension. . . . The vasomotor center being influenced reflexly by stimuli from the cortex, such as worry, strain, pain and various other emotions." The same author believes that there are some cases of high blood pressure caused by allergic condition in which there is a swelling of the wall of the blood vessels, in fact, "an urticaria of the blood vessel." He reports cases in which epinephrine given to relieve asthma and urticaria promptly brought the systolic and diastolic readings to within normal, where they

were exceedingly high before the injection. I have seen this happen in two cases. Other factors which have been stressed as causes of hypertension are focal infections, some chemical toxin circulating in the blood, increased viscosity of the blood, obesity, pain and syphilis.

Since I began keeping accurate records of these cases, I have had 45 women and 33 men come under my observation. In this group there are only ten negroes, although that race probably outnumbers the whites three to one in my county. They range in age from 22 to 80. Their blood pressures range from 160 to 300 systolic and 90 to 160 diastolic. The average age of the 33 men is 58½ and of the 45 women 57¼ years.

It is interesting to classify them according to occupation. They are:

Housewives	40
White Farmers	11
Merchants	3
Negro Farmers	3
Washer-women	3
Railroad Agents	2
Negro Cooks	2
Mail Carriers	2
Lawyers	2
Clerks	2
Undertaker	1
Secretary	1
Truck Driver	1
Merchant and Farmer	1
Watchmaker	1
Laborer	1
Inveterate Loafer	1
Liveryman	1

Classified according to Etiology, they are:

Essential Hypertension	60
Endocrine	7
Syphilitic	4
Renal	3
Aortic insufficiency	3
Allergic	1

The above classification is, of course, purely arbitrary, but just as I had them in my records. It is based on physical, clinical, laboratory and therapeutic findings. Those classified as syphilitic all had positive Wasserman and improved under treatment. Those classified as endocrines all improved on glandular treatment.

One of these cases, a wife of 30, began menstruating irregularly two years ago, menstruating at intervals of two to four months. At that time she complained of dizziness,

palpitation and dyspnea. Her blood pressure reading was 170/100. She was put on *corpus-lutea* sixty days. She menstruated regularly six months and during this interval her blood pressure came down to 120/80. She came in again last week, having missed three months, and her blood pressure was then 160/100. All evidence in this case points to an endocrine factor. One of these cases, an old colored woman, 65 years of age, has lived and followed her vocation for two and a half years, with an average reading of 290/130. There is no evidence of aortic insufficiency, although there is marked dilatation and hypertrophy. One of the number, a farmer, aged 25, a man over six feet and weighing 200 pounds, with hypertensive heredity, was examined by me for life insurance the latter part of 1929. His blood pressure at that time was 170/100. In January, 1930, he came in with secondary rash and mucous patches. His blood pressure reading was still 170/105. He has been on intensive syphilitic treatment since. October 1, his reading was 120/75. Two of these cases point to the heredity factor. Two white men, one 22 and the other 28 years of age, the fathers of both having had cerebral hemorrhage, were examined for life insurance. The former's pressure was 170/100, and the latter 160/100.

I have often thought that nature compensates the negro race for its low economic and educational condition, by an increase in resistance and natural immunity to disease, and I find in hypertension no exception to that belief. For, of the ten negroes, four came complaining of epistaxis and two of pulmonary hemorrhage. They, of course, were let alone and nature lowered the blood pressure.

There is one puzzling and discouraging fact that this series brings to our attention. Of the 33 men, ten are dead; 5 from cerebral hemorrhage and 5 from heart failure. Of the 23 men living, 4 have had cerebral hemorrhage. Of the 45 women treated in this group only one is dead. She died of cerebral hemorrhage. None of the 44 living women has cerebral hemorrhage. The death rate among the males in this group is 30 per cent, and the females two per cent, with only

a difference of $1\frac{1}{4}$ years in the average age of the two groups, and no appreciable difference in the average height of the blood pressure readings between the two. Why there is this marked difference in mortality, I am unable to explain.

These cases are probably a cross section of what we all see in this part of Georgia. To me, they prove that there is not one factor, but numerous ones in the causation of hypertension.

If we summarize the work of all the writers on this subject, in which thousands of cases and controls have been studied and analyzed, we find the following as probable causes:

1. Heredity.
2. "A spasm of the arterio-capillary bed, produced by the vasomotor center in the medulla. The vasomotor center being stimulated, reflexly from the cortex, by worry, strain, anxiety, pain, the excesses of life and by poisons, whether endogenous or exogenous.
3. Endocrine.
4. Allergy.

Treatment—It is true in this condition as in all others in medicine, that treatment in any given disease increases in a geometrical ratio to the probable causes of that disease. The multiplicity of remedies makes us skeptical as to the value of any of them. And it is not to be wondered, that one of the greatest teachers of medicine in this country dismisses the subject by saying "Treatment does no good." Yet, it is our experience and the experience of most clinicians that many of these unfortunates are benefited if properly handled. So, I will outline a few fundamentals, those most universally used today in the management of high blood pressure.

About 50 per cent of the hypertensive cases die of cardiac failure, 30 per cent of cerebral catastrophe, 5 to 7 per cent of uremia and the remainder of some intercurrent disease. From these figures we perceive that all our efforts in treatment should be directed at preventing cardiac, vascular and renal complications, or where these have already become impaired, to reduce their work and prevent further damage. In other words, a sphygmomanometer reading *per se* is worth-

less. Many times a lowered blood pressure denotes a failing heart, rather than an improvement in the patient's well-being. On the other hand our blood pressure apparatus is of inestimable value, if we are at the same time keeping ourselves posted as to the condition of the cardio-vascular and renal systems.

We admit that heredity plays the leading role in the causation of hypertension. If it does, theoretically, prophylaxis should be our first asset in treatment. Yet, how many of us have seen the hypertensive father bring his son in to receive his education in the ways of forfeiting his heritage to be? The answer is obvious and the fault is to be laid at our feet. With our advice this boy might be able to choose his vocation, his manner of living, so as to prevent his following so closely the physical footsteps of his ancestors. This is, of course, a farfetched vision, but it seems to me that it is one that should be kept before us to stimulate us to greater education along this line.

Rest seems to be the best therapeutic agent in this condition. Not a complete cessation of function, but an economy of function. In all these cases, we have mental, physical and chemical over-activity, which increases the circulatory demand. It therefore seems reasonable that if we modify this activity, we will prevent hypertrophy, which is simply an expression of over-work. It is my experience that to tell these patients of their blood pressure reading in figures and to advise them to sacrifice their occupation or business, does harm rather than good. By so doing we make hypertensive neurasthenics of them and thereby increase the worry, anxiety and mental anguish, the very things that we are trying to abolish. I believe these patients do better to retain their interests and do some work. Periods of rest are beneficial, but for a man of middle age to relinquish his work, to give up all the habits of his life, and in this section where few are wealthy, to worry over the financial side of his affairs, is generally followed by a complete collapse. I believe that we should advise him to shorten his hours to take advantage of the week-ends for mental relaxation, to take frequent short vacations, and a long one at least once a year.

To lie down and relax after the noon-day meal, to sleep at least eight to ten hours nightly, and to take moderate exercise in whatever manner is most enjoyable to him. These patients should not be put to bed, unless there is evidence of cardiac or renal failure, or fear of cerebral damage, and then they should be let up when this hazard is over. It is a high ambition to take a man, prematurely senile, one who has never played, blue, highstrung, irritable, complaining of sleeplessness, dyspepsia and headaches and make of him a peaceful, cheerful, fun-loving, mentally relaxed individual. Yet, such a metamorphosis is our goal, because it is worth while.

Diet—After years of disagreement as to what to give and what not to give the hypertensive patient in the way of food, the profession as a whole, has at last agreed that it matters not what we give so long as the blood pressure is concerned. Proteins have been condemned by some, carbohydrates and fats by others, salt by a few, and in my county, one advised the patient not to eat the white of an egg, and another in three days admonished the same patient not to eat the yellow of an egg. Is it any wonder that he went home and told his wife to scramble him some eggs? It makes me happy to be able to tell my patients to eat whatever they want, so long as they eat in moderation. Of course, in obesity, in a decompensating heart, in fact, in any of the terminal sequelae of hypertension, we should diet the patient as best suited to that condition. The reduction of fats and carbohydrates in the obese, the elimination of salt and proteins and a reduction of the carbohydrates in cases of failure of the heart or kidneys is good treatment.

Drugs—At last we have become honest with ourselves and admit that drugs are of little value in the treatment of hypertension. Alvarez and his co-workers have thoroughly demonstrated that auto-intoxication plays no part in the production of this condition and purgation is worthless. Also, liver extract and the extract of watermelon seed have been found useless. Bromides are of benefit to relax and quiet the nervous irritability. Sodium nitrate and nitroglycerin are of value only to lower pressure temporarily and tide

over a threatened hemorrhage. In cases of heart failure, digitalis should be given, just as if we had no high blood pressure. It raises blood pressure only in those cases where it is low as a result of a fagging heart muscle. Epinephrine and calcium iodide, the latter in large doses, are of benefit to the so-called asthmatic type. So is corpus luteum in the menopausal type. At some of the German clinics sodium sulphocyanate has been used with apparent success. Dr. R. C. Logefeil of Minneapolis reports its use in 24 cases. In 22 of the number the average fall of blood pressure was 55 points systolic and 35 diastolic. Drs. Arthur G. Smith and R. D. Rudolph of Toronto, in the Canadian Medical Association Journal, report its use in 70 cases at a general hospital clinic. They used $2\frac{1}{2}$ to 5 grains, two to three times daily over periods of from one to four weeks. There were no toxic symptoms and no change in pulse rate. There was a sedative effect, relief of the dizziness, fainting and vertigo in most cases and a fall of blood pressure in practically all. At present the use of this drug gives us hope that it may be beneficial in hypertension.

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DISCUSSION ON PAPER OF DR. KENYON

Dr. Stewart R. Roberts, Atlanta, Ga.—This is a good, timely paper, well delivered and full of good material. One hardly knows where to begin to discuss it. Only 21 per cent of the people in the United States live beyond 44 years of age, about one in five. I have just looked over the "In Memoriam" list of our Association, and I know many of these men were taken away from us because of hypertension. Many of us in this room will go the same way, because of hypertension or of its sequelae. Really, it is a symptom of disease. It probably causes 60 per cent of all cases of heart disease, but really it is a symptom. It is a mechanical vascular expression of something that is going on in the nervous system, something that is

gradually accumulative, and finally reaches a mechanical apex. We are safe as long as we can stand the vascular strain. More and more I am drawn back from more drugs, more prescriptions, to what the patient does from the time he gets up until he goes to bed. What skeletons are in memory's closet? What does he think about? Is he impatient, or has he learned the thing we call contentment? I am inclined to think that hypertension is a neuromuscular expression of the emotional and mental life, and of the spiritual life if you would add that. We have come to feel in our office that by a study of the roentgenogram of the colon we can guess what kind of a nervous system the person has who owns the colon. If you would go into this subject, read Jacobs on "Neuromuscular Relaxation." He shows many things of interest, and explains the effects on the nervous system. Think of the effect of trying to get rich during a whole life, think of the nervous tension one is under. Think of the effect of getting mad, with all that entails. May I also call your attention to the article by Dr. Houston, of Augusta, which is splendid? The best book on this subject, I think, is Stieglitz on "Hypertension." It is his suggestion that we give sodium nitrate in small doses every day, and that is changed into nitrite in the gastrointestinal system and acts as a constant depressor. That is only one drug, but it is far more than a drug we need in the treatment of these cases if we are to be successful.

Dr. J. A. Redfearn, Albany, Ga.—I wish to congratulate Dr. Kenyon on his splendid paper. I do not know of anything we treat that will bring any more quickly to our minds the paucity of our knowledge. I was impressed with this a couple of years ago, when a 90 pound negress came into my office complaining of pain in the shoulders, arms and legs. Her blood pressure was 210/140. The kidneys were negative and she seemed not to need anything for treatment except rest. I gave her some sample tablets for rest and told her to come back. She came back with a cough, and I gave her a bottle of sample cough mixture. She liked that better than anything else, and I have found a use for cough syrups without paying any attention to who furnished the sample.

Dr. Kenyon devoted about two and one-half lines to malignant hypertension, and I was glad he did for I have seen many of my best friends pass away, and yet I have seen this negress run a pressure of 240/155 or thereabouts and still live, and she is just now beginning to show a little cardiac degeneration. I started three days ago giving her some sample tablets of digitalis, which are carrying the work right on. I think sample medicine is pretty good treatment in these cases.

Cecil says that there is no disease in which it is more important to treat the patient rather than the disease. Cabot says "There is no diet, dismiss it." We have to order some diet, but he is right. We have to reduce the proteins, but we do that in healthy individuals whether they have hypertension or not, for all it does is to supply body tissue waste, and there is less waste at that age. We tell these patients not

to use abnormal amounts of salt, and that is about what we tell normal, healthy individuals of the same age. Cabot says that 48 per cent of all sick people are affected directly or indirectly by some neurosis, so suggestion is a powerful aid in treatment. Sedatives, luminal and the opiates, are helpful in some cases. The French use a combination of iodo-sulphur, and with one dose every two or three days and later every two or three weeks one can sometimes hold the pressure down. One patient with a pressure 260/155 for a number of years seems to be in fairly good health, but I have used the same remedy in other cases with no benefit. I think there is no great benefit from anything other than sedative drugs.

Dr. Lewis M. Gaines, Atlanta, Ga.—There is not one of us who is not daily and vitally interested in this question of hypertension. Several different points, it seems to me, are well worth while to consider.

When a patient is first seen with elevation of blood pressure it does not do to conclude that it is a case of permanent hypertension. We should be careful in our technic. Many instruments are not properly calibrated. Second, it does not do to conclude from one, or two, or even three readings that the blood pressure is the customary pressure. As Dr. Roberts indicated, there is a great emotional factor in these cases. I have seen large variations in the systolic pressure and to a degree in the diastolic pressure following emotional upsets.

Another thing I consider important is to develop a definite plan in the examination of these patients. It is always important to investigate the kidney function, and to be sure to rule out the other possible causes of hypertension. Having done that, a plan was suggested years ago at the Mayo Clinic which I have attempted to follow out. That is, to study the patient in the hospital, if possible, for a period of five to seven days. Watch the patient under rest and nothing else. Second, watch the influence of sedative baths, taking the pressure before, during, and thirty minutes after the bath. Third, watch the effect of sodium nitrite given at two hour intervals, watching the pressure during the daytime. Fourth, watch the effect of a sedative on the order of luminal. Sometimes you will find response to one, two, or to none of these. That gives us an idea as to the prognosis and as to the type of therapy that may be of the greatest benefit to the patient.

One point in regard to prognosis which I think is extremely interesting and important. We have the malignant cases and the benign cases, and I think we should have an intermediate group. Following the plan I have outlined, it is possible to place these patients in the group where they belong.

Finally, the examination of the eye grounds is extremely important and will often give us a most important clue as to the outlook for life in a case of this type.

Dr. Steve P. Kenyon, Dawson, Ga. (closing).—I thank you for the discussion.

Dr. Neal Kitchens, Warm Springs, Ga.—This morning I saw a report in one of the local newspapers regarding the discussion of Dr. Kenyon's paper on hypertension yesterday and I am sure a wrong idea will be obtained by the public unless more of the context is added. The report stated that 125,000 people in the United States died each year from hypertension, and that the consensus of opinion of the members of the medical society was that hypertension was due to neurosis for which there was no specific treatment. I wish to go back to the causes of neurosis, and see if we cannot find a ray of hope for the half million people of the country who are suffering from hypertension, and at the same time, find a preventative to protect those who come after us.

The evolution of man from savagery to civilization has been so rapid that the changes in his digestive organs have not kept pace with the changes in his diet. Going from an original all raw diet to one nearly all cooked has been too rapid. Furthermore, in recent years man has devitalized and defibrenated his food to such an extent that he requires millions of pounds of laxatives to force his food through the alimentary canal. Nor is this all, man has sacrificed on an average 88 per cent of the mineral elements of the staff of life, the wheat grain, to appearances and 30 per cent of the protein, the nerve food, is thrown out. Then is it any wonder that he is nervous?

We had to pass the Harrison narcotic law to prevent the nation from becoming dope fiends. Millions upon millions of pounds of coffee and millions of cold drinks containing caffeine are consumed and proclaim the cry of exhausted nerves for stimulation. Billions of cigarettes are required to calm the excited nerves. The essential oil of coffee produces thousands of cases of cancer of the stomach and apoplexy. Cigarettes cause cancer of the mouth, and so-called heart failure. The resultant of these two forces is thousands of cases of hypertension.

The remedy is to eat more raw food, cut out all stimulants and narcotics and eat some raw wheat every day. If your teeth are good, chew it; if not, grind it in your coffee mill or get a hand mill. No whole wheat flour is sold in any stores. The protein undergoes rapid changes in damp, hot weather and will not keep. The wheat grain contains 16 of the 21 elements of which man is composed. So the scriptural saying that man cannot live by bread alone is backed up by chemistry.

I wrote to the United States Public Health Service at Washington, to find out from what source man obtained the five elements, aluminum, copper, zinc, lithium and lead, which are not contained in the wheat grain. They said they did not know, but they backed up an observation which I had made that the protein of raw wheat is more digestible than that of the cooked wheat. In reply to other questions they said they had not made the experiment and could not answer. For that reason I asked Senator Harris to introduce a bill making an appropriation for a scientific laboratory for research work on foodstuffs. The road of progress is not confined to the valley of precedent, but ascends the rugged heights of untrammelled thought.

THE VALUE OF THE WASSERMANN TEST IN CLINICAL MEDICINE*

T. L. BYRD, M.D.

Atlanta

Syphilis is a specific disease common to the human race, caused by the spirochaeta pallida. It is acquired by contact or congenital in origin. It can be produced in apes, monkeys and rabbits for experimental purposes, by direct inoculation with an emulsion of living spirochaetes. The disease has no respect for either race or class distinction, as it affects the rich, the poor, commoners and noblemen alike. Writers¹ who contend for the antiquity of the disease in Asia and Europe, rely on certain Chinese records and references in old medical literature in which diseases resembling syphilis were described. The disease became prominent immediately after Columbus discovered America in 1492, and there has been much discussion pro and con as to whether it was brought to America by his crew, or did they contract the disease from the American Indians? Block in the *System of Syphilis*, Vol. 1, 1908, insists that there was no evidence of syphilis in the Eastern Hemisphere until the return of the Spanish sailors from Haiti, who spread the disease among the inhabitants of Barcelona. It reached Italy in 1493 with the army of Charles VIII, and from Naples it spread throughout Italy and Europe. It bore the name of Neapolitan disease, French pox or Morbus Gallicus until 1530, when Fracastorius gave it the name of Syphilis Sive Gallicus Morbus. During the Sixteenth Century the symptoms were well described. Fernel of Paris insisted on the necessity of a primary inoculation and Paracelsus observed its congenital character. In the eighteenth century, Lancisi recognized the relation existing between syphilis and aneurysm, and Morgagni described many of the visceral lesions. Much study was done throughout the nineteenth century, but all efforts at discovering the cause had failed, until 1905 when Schaudin demonstrated the presence of spirochaetes in the lesions. At the same time Wassermann² was developing the complement-binding re-

*Read before the Fulton County Medical Society, Atlanta, Ga., August 3, 1930.

action, the test which bears his name. Until the above discoveries, clinicians had to depend entirely on the clinical symptoms, and their judgment, in making diagnoses of syphilis, and differentiating other diseases from this condition.

The Wassermann Reaction

The complement-binding reaction worked out by Wassermann in the early part of the twentieth century gave to the world a very valuable aid to clinical medicine. Wassermann proved by this test that the blood of a syphilitic contained a specific substance that under certain conditions would combine with an antigen, and the two absorb the complement, therefore leaving no free complement to act with the hemolysin, and as a result, an inhibition of hemolysis and a positive fixation. This phenomenon was not found in blood from individuals who did not have the disease. His original antigen was a water extract of a syphilitic foetal liver, which was supposed to be necessary for the specificity of the test.

Levaditi and Marie³ in 1906 demonstrated that an antigen made from normal liver could replace that made from syphilitic liver and get the same results. They also found that an alcoholic extract of this organ was far superior as an antigen to a water extract. This put a question on the specific nature of the sero-reaction, but these authors concluded that this knowledge of the Wassermann phenomenon by no means detracted any of its value, as a practical diagnostic procedure. Since the discovery of this reaction, there has been an untiring effort on the part of many workers, in an attempt to determine the nature of the substance in the blood of syphilitics, that gives the complement-binding reaction. The method of approach of this reaction has been the treating of animals with non-specific materials and producing an identical reaction to that obtained with syphilitics. Positive Wassermanns were produced by Citron and Munk⁴ in 1910 by treating dogs with a water extract of syphilitic foetal liver; Bergel⁵ in 1912 by injecting rabbits and guinea pigs intra-pleurally and intra-peritoneally with one per cent lecithin; Landsteiner and Sims⁶ in 1923 by injecting rabbits with an alco-

holic extract of horse kidney and normal human or hog blood serum; Klopstock, Sachs and Weil^{7 & 8} in 1925 by injecting rabbits intravenously with an alcoholic extract of rabbit kidney and 1-10 hog serum for twenty-one days; Heinmann⁹ in 1926 by treating rabbits at four-day intervals with 5 cc of a water extract of rabbit liver and 5 cc of 1-10 hog serum. The writer¹⁰ was successful in 1927 in producing positive reactions in rabbits by intravenous injections of cholesterinized alcoholic extract of beef heart and 1-10 hog serum. The reaction was not obtained by the injection of either of these substances alone, but after the mixture of the two had stood for one hour at room temperature.

The older writers, and many of the present day, think that the substance is an antibody, some an auto-antibody, and others a lipoidal protein. The evidence is in favor of the substance being a lipoidal-protein tissue reaction, as a result of an active syphilitic infection. If this is an antibody, why does it disappear when the patient improves, under proper anti-syphilitic therapy, or nature's method of healing? This is contrary to the theory of antibody formation, as a protective measure against typhoid fever, diphtheria, tetanus and many other conditions.

The Wassermann Technic

There have been many modifications and improvements in the complement-binding reaction since its origin, but the fundamental principle remains the same. Most of the technics now in use are safe and reliable in competent hands, and very disastrous in incompetent and careless hands. It is even more dangerous for the report to fall into the hands of a physician who does not consider the infallibility of the test and takes every report to be "law and gospel," or one who is looking for an excuse to give anti-syphilitic treatment.

In brief, the glassware should be chemically clean, the normal salt solution made with fresh distilled water, sterilized in an Arnold to prevent evaporation. The complement should be prepared by pooling the sera obtained from two or more healthy guinea pigs and never preserved. The sheep cells should be collected fresh and not used

after the third day, because if unpreserved they will become fragile, and if preserved with such as formalin, they will harden and alter the test to some extent. Hemolysin is stable and will keep indefinitely if properly prepared. Antigen is also stable, but should be carefully titered every five to six months in accordance with the technic used. Never titer an antigen in a water-bath and use for an ice-box fixation. The titer of the hemolysin and complement on the day of the test is necessary and most important. The activity of the complement should be carefully noted; that is, if the reaction is completed in ten, fifteen or thirty minutes. This is a very important point not usually considered as such by the average technician. Four units of hemolysin for human and eight units for rabbits' blood should be used. During the test the temperature should be kept at a constant level. A positive and negative sera and antigen controls should be run with each batch of Wassermanns.

The specimens to be analyzed should be submitted to the laboratory, fresh and not contaminated; the tubes plugged with corks or the best grade of absorbent cotton. The blood specimens should not be collected from the patient at the height of digestion, of a high protein, fatty meal, as the blood is charged with lipoidal-protein substances, and may give a false positive reaction. The blood should not be drawn for several days following the ingestion of alcohol, as the latter is a strong lipoid solvent and a false negative reaction may be obtained. Specimens should not be collected while a patient is under an ether anesthetic, because ether is a tissue lipoid solvent and may throw enough of this substance into the circulation to produce a positive reaction. If all the above precautions in regard to technic and the collecting of specimens are carefully adhered to, it would go a long way towards the prevention of false sero-reactions.

Diagnosis

The Wassermann test has been adopted as routine, almost universally, and it has done both harm and good. The clinician should be very careful in making a diagnosis of syphilis, because in many instances, it involves an individual's social, physical and

financial status, as well as causing breaks in domestic relations. An early diagnosis is very much desired as in any other disease, but the facts should be well established. In primary syphilis, with the chancre, the laboratory should take precedence over the clinical examination, as many small innocent penile sores have taken on the typical characteristics of Hunterian chancres, by the local application of irritants, usually applied by the patient before coming for examination. In this stage the darkfield is at its best, ninety to ninety-five per cent positive. If a darkfield is not available, serum from the sore should be obtained; this gives a positive Wassermann before the blood. The latter is only positive in twenty-five to thirty per cent in the first week of the primary lesion, gradually increasing as the secondary stage is approached.

In the secondary or eruptive stage, the Wassermann is at its best, being positive in ninety-eight to one hundred per cent. With the typical eruptions a Wassermann is not really needed to make a diagnosis.

In the latent stage only fifty to seventy per cent have positive Wassermanns. This group of cases are the ones that the clinician has to give the most thought. A large percentage of these patients present no clinical symptoms, and a positive Wassermann is found on routine examination. The question to decide is whether these patients have syphilis or not. The Wassermann is the only positive finding. In such cases not less than three to four blood specimens should be taken at weekly intervals, a portion sent to different laboratories, and let the majority of positives or negatives help make the final decision. Then there is the thirty to fifty per cent of patients falling into another class, of latent syphilitics, who present vague, unexplained symptoms, with a suggestive history, and negative Wassermann. Here the provocative Wassermann comes into its own, and will often clear the situation. According to Greenbaum, Wright and O'Leary it is positive in eighteen to thirty per cent in selected cases.

In the tertiary stage, the Wassermann is positive in only fifty to seventy-five per cent, in the face of unmistakable specific lesions, too numerous to mention. The clinical as-

pect of the case should far exceed the laboratory findings. The provocative is indicated here, but the results should not outweigh the clinical side.

In neuro-syphilis as a whole, the blood Wassermann is positive in only thirty to fifty per cent. The amount of therapy given before this stage is reached may be a factor. Here the spinal fluid examination takes precedence over the blood. It, like the blood, is not infallible, and should never be run on less than 1 cc. In early cerebro-spinal lues, the spinal fluid is positive in about sixteen to thirty per cent, the meningeal type twenty-five to thirty per cent, while tabes and paresis give a percentage around seventy-five to ninety-five.

The Wassermann in Treatment

There is no greater mistake in clinical medicine than for anyone to let the Wassermann serve as a guide in treating a syphilitic patient, or take it as evidence of a cure. It is used of course, and should be, but a negative reaction oftentimes gives both the physician and the patient a false security which is dangerous. The reliable stars for guidance are time, continuous therapy and clinical observation.

In conclusion, the Wassermann reaction should be regarded as only one link in a chain of evidence, in making a final diagnosis, or as a guide in therapy. A corollation of the clinical and laboratory findings is only reliable. A positive Wassermann means a corroboration of clinical findings, or something to be checked up with more study. A negative Wassermann should be taken for what it is worth. After all is said and done, the value of the Wassermann alone depends entirely on the reliability of the personnel of the laboratory from which it comes.

Summary

1. A brief history of the origin of syphilis.
2. A discussion concerning the substance in the blood of syphilitics that gives the complement-binding reaction.
3. The Wassermann technic, and precautions to avoid errors.
4. Under what conditions blood specimens should or should not be taken.
5. The Wassermann in diagnosis of the

different stages of syphilis, and as a guide in therapy.

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IMMUNIZATION OF ADULTS AGAINST DIPHTHERIA*

Comparison of Toxoid and Toxin-Antitoxin in Adults

ROY R. KRACKE, M.D.

ANGEL ALLEN, B.S.

Emory University

In 1913 Von Behring showed that adults may be safely immunized against diphtheria by using diphtheria toxin neutralized with anti-toxin. The value of this process was soon confirmed by Park¹ and has been extensively practiced in this country.

The immunization of adults with toxin-antitoxin mixtures has been highly successful, yet it is accompanied by certain disadvantages. First, the toxin is sometimes under-neutralized with antitoxin, resulting in severe reactions. Secondly, the toxin may be overneutralized with antitoxin, resulting in a preparation that is inadequate for the production of immunity. It has been the aim of those who manufacture these products to prepare a mixture that will strike a medium between these conditions, that is, toxin and antitoxin mixed in such proportions that the highest number of immunizations may be had with the least number of reactions.

In his first work on this subject, von Behring recognized the need for an immunizing agent that would be effective with few reactions and at that time attempted to modify diphtheria toxin by the addition of iodine, thus producing an agent that would lose the toxic but retain the antigenic properties. This was unsuccessful. In 1923,

*From the Department of Bacteriology of Emory University School of Medicine, Emory University, Ga.

Schroder and Park² immunized a group of adults with diphtheria toxin that had been allowed to stand over a long period after dilution with salt solution, thus producing a form of toxoid through deterioration. They reported that the substance gave a "fairly satisfactory immunizing response" with little local reaction.

In the same year (1923) Ramon³ reported the successful use of diphtheria toxin modified by the addition of 4 per cent commercial formaldehyde, and stated that this product, which he called "anatoxin," was characterized by its high antigenic and low toxic qualities. This product has gradually been introduced into this country and has been recommended as being far superior to toxin-antitoxin, especially for the immunization of children. Ramon⁴ has also used it on adults, and in 1929 Dick and Dick⁵ reported its use in the immunization of 144 student nurses, among whom they had nine severe reactions with 93 per cent immunizations. They concluded that diphtheria toxoid as prepared by Ramon is a better immunizing agent than toxin-antitoxin and that it may be safely employed in the immunization of adults.

During the winter of 1929, there were four cases of diphtheria among the nurses of Wesley Memorial Hospital, Emory University, Ga. As a result of this it was decided to immunize the entire hospital personnel in an effort to eradicate the disease. After studying the report of the Dicks, diphtheria toxoid was decided upon as the most satisfactory agent.

Since the preparations described by Ramon were not available, the Lederle product was used. This was obtained from the State Board of Health and directions for its use, which accompanied the product, were carefully followed.

A schick test for determination of susceptibility was carried out in 125 nurses and 49 colored employees. The results follow:

Number of nurses tested.....	125
Number positive	41 or 33%
Number negative.....	84 or 67%
Number colored employees tested ..	49
Number positive.....	5 or 10%
Number negative.....	44 or 90%

The nurses, all white females, ranged from 18 to 30 years. The 33 per cent positive

reactions are in accord with previous findings of individuals in that age group. The colored employees ranged from 20 to 50 years, and were about equally divided as to sex. The 10 per cent positives seems unusually low, though the difficulty of reading the test in this group must be taken into account. There seems to be no reason for such racial difference in susceptibility.

In the 41 positives in the nurses' group, there were five marked pseudoreactions, or those exceeding one half cm. in diameter. The remaining 36 were then given toxoid, since it is claimed that the absence of a pseudoreaction insures the safety of the administration of this product.

REACTIONS FOLLOWING TOXOID

Number	1st Dose	2nd Dose	Schick Retest
1	Moderate	None	Negative
2	None	None	Negative
3	Slight	None	Negative
4	Severe	Severe	$\frac{1}{2}$ —0*
5	Slight	None	Negative
6	Slight	None	Negative
7	None	None	Negative
8	Moderate	None	Negative
9	Slight	Slight	$\frac{1}{2}$ — $\frac{1}{4}$
10	Moderate	Slight	Negative
11	Slight	Slight	Negative
12	None	None	$\frac{1}{2}$ — $\frac{1}{2}$
13	Severe	No dose	1/—1
14	None	No dose	Negative
15	Slight	Slight	Negative
16	Severe	No dose	Negative
17	Severe	Severe	3—2
18	Slight	Slight	3—3
19	Severe	No dose	4—2
20	Severe	No dose	Negative
21	Severe	Severe	Negative
22	Slight	None	Negative
23	Moderate	Slight	Negative
24	Moderate	Moderate	$\frac{1}{2}$ — $\frac{1}{2}$
25	Slight	None	3—2
26	Severe	No dose	4—0
27	Slight	None	Negative
28	Slight	None	No retest
29	None	None	Negative
30	None	None	Negative
31	Moderate	Moderate	Negative
32	Severe	Moderate	1—1
33	None	None	Negative
34	Severe	No dose	Negative
35	Severe	Moderate	2—1
36	Severe	No dose	Negative

Number	36
Negative retests.....	32 or 88%
Positive retests	4 or 12%
Severe reactions, 1st dose.....	12 or 33%
Moderate reactions, 1st dose.....	6 or 17%

Slight reactions, 1st dose.....	11 or 30%
No reactions, 1st dose.....	7 or 20%
Severe reactions, 2nd dose.....	3 or 10%
Moderate reactions, 2nd dose.....	4 or 14%
Slight reactions, 2nd dose.....	6 or 21%
No reactions, 2nd dose.....	15 or 50%
Refused 2nd dose.....	8 or 22%
Of these 8, retest negative.....	6 or 75%
retest positive.....	2 or 25%

*Figures refer to cm., test and control.

In the above table the reactions are classified as severe, moderate, slight, or none. Severe reactions are those in which the patient was confined to the hospital, with a loss of time from duty, temperature over 100 F., generalized aching pains, in some instances nausea and vomiting, all being accompanied by large, red, swollen, indurated areas at the site of injection.

The moderate reactions are those in which there was increased temperature less than 100 F., with large local induration, slight systemic manifestations, and no hospitalization necessary. A few of these, however, lost one day from duty.

The slight reaction includes those with no systemic manifestations, no increased temperature, and with the reaction being entirely local.

Of the 36 immunized, 12 were hospitalized the following day, the period of hospitalization varying from one to ten days. Many others, remaining on duty, were handicapped in their work by the effects of the toxoid. It will be seen from the table that eight of the twelve severe reactors refused the second dose. Of the four remaining severe reactors, three had severe reactions on the second dose.

One month later the second dose was given to 28. The reactions as a whole were less in severity than those following the first dose.

Schick retests were carried out three months after the second dose, with the results as shown in the table.

Of the 36 immunized, 32 or 88 per cent, gave negative reactions. This indicates that the immunizing value of toxoid is excellent. Of the eight who refused the second dose, six gave negative reactions, attesting to the high immunizing value of the product, since immunity was produced by one dose. Hav-

ing observed the reactions and results in this series, it was then decided to run a control series of a similar group of individuals, using toxin-antitoxin, prepared by Lederle, given at weekly intervals for three doses.

For this purpose the nurse personnel at Piedmont Hospital, Atlanta, Ga., was tested for susceptibility. The results of the Schick test follow: -

Number tested	69
Number positive	29 or 42%
Number negative.....	40 or 58%

This positive percentage, being slightly higher than described before, was also in a group of white females, all nurses, similar in age, occupation and living conditions to the first group described.

Of the twenty-nine positive, all were given intradermal injections of the toxoid, according to directions, and twenty-five gave positive reactions. Four were negative and these were given two immunizing doses of toxoid without reactions.

The twenty-five positive toxoid reactors were then immunized with toxin antitoxin, with the results as shown in the following table. The severity of reaction is classified as described before.

Reactions and Results of Immunization With Toxin-Antitoxin

No.	1st Dose	2nd Dose	3rd Dose	Retest
1.	Slight	Severe	Severe	Negative
2.	Slight	Slight	Slight	Negative
3.	Slight	None	None	Negative
4.	Slight	Slight	Slight	2 - 1
5.	Moderate	Slight	None	Negative
6.	Slight	None	None	Negative
7.	Moderate	Slight	None	3 - 1
8.	Slight	Slight	Slight	1 - 1
9.	Slight	None	None	Negative
10.	Severe	Severe	Slight	4 - 0
11.	Severe	Moderate	Slight	3 - 1
12.	Moderate	Slight	Slight	$\frac{1}{2}$ - $\frac{1}{2}$
13.	Slight	Slight	Slight	2 - 1
14.	Slight	None	None	2 - 1
15.	None	None	None	4 - 1
16.	Moderate	Slight	None	2 - 2
17.	Slight	Slight	Slight	Negative
18.	Severe	Moderate	Slight	2 - 0
19.	Moderate	Slight	Slight	2 - 2
20.	Severe	Slight	Slight	3 - 1
21.	Moderate	Slight	Slight	2 - 1
22.	Moderate	Moderate	Slight	4 - 1
23.	Slight	Slight	None	1 - 1
24.	Slight	Slight	Slight	Negative
25.	Slight	None	None	Negative

Number Immunized25

Number negative retests.....14 or 56%

Number positive retests.....	11 or 44%
Severe reactions	4 or 16%
Moderate reactions	7 or 28%
Slight reactions	13 or 50%
No reaction	1 or 4%
Intradermal toxoid negative.....	4
No reaction with toxoid.....	4
Schick retest negative.....	4

It will be noted that only four severe reactions occurred on the first dose, while one reacted severely on the second and third doses. The Schick retest, carried out three months after the final dose, showed 14 or 56 per cent to be immunized and 44 per cent still positive. This is a very low efficiency for this product, and the toxin antitoxin certainly is not so efficient for the production of immunity as the toxoid, but reactions are less frequent and less severe.

Discussion

It has been pointed out that the use of toxoid should be preceded by an intradermal injection of the substance to determine susceptibility and in those who are susceptible, the toxoid should not be used. In our second series of twenty-nine intradermal tests, we obtained positive reactions in twenty-five, allowing the use of toxoid in only four. In the thirty-six in which no intradermal reaction was carried out, but in which the pseudoreaction of the Schick test was accepted as an index to susceptibility, marked and serious reactions occurred.

In the group of twenty-five immunized with toxin antitoxin, only 56 per cent gave negative Schick retests. This is a low rate of efficiency and in a few of this group, severe reactions occurred. Immunization with this product seems to be hardly worthwhile if no better results can be obtained, and immunization with toxoid seems to be inadvisable due to severe reactions. It seems, then, that there is not yet an agent available against diphtheria. So the question arises as to the advisability of immunizing adults under any circumstances. Is this a worthwhile procedure, in view of the reported cases here? It may be that the toxin antitoxin used had deteriorated, such as was reported by Rhoads⁶ in immunizing nurses in Cook County Hospital.

From our work, it seems that should an individual request diphtheria immunization

from a private physician, that this person should first have a Schick test to determine susceptibility, then an intradermal test with toxoid, and if negative, two doses of toxoid, followed three months later with a Schick retest. This process requires seven inoculations over a period of four months, and as indicated by our series serves to emphasize the importance of immunizing children before the age of six, at which time toxoid may be administered with little danger of reaction and with a high degree of success.

Conclusions

1. A small series of adults immunized with diphtheria toxoid, and a similar group immunized with toxin-antitoxin, is presented for comparative study.
2. Toxoid produced immunity in 88 per cent of those receiving it while toxin-antitoxin produced immunity in only 56 per cent.
3. The use of toxoid was characterized by the frequency of severe reactions, while toxin-antitoxin was responsible for only a few reactions of less severity.
4. Such results as presented only serve to emphasize the importance of immunizing children before the age of six.

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MILIARY TUBERCULOSIS OF SPLEEN WITH THROMBOPENIC PURPURA HEMORRHAGICA

According to Ellis Kellert, Schenectady, N. Y. (Jour. A. M. A., June 27, 1931), tuberculosis of the spleen is uncommon considering the total number of tuberculous individuals, and even more rare is its association with purpura hemorrhagica. He describes the case of a woman in whom these two conditions concurred and in whom there seemed to be a relation between the infectious process in the spleen and the severe purpura hemorrhagica.

RECURRENT PROSTATIC HYPERTROPHY

Case Report

E. B. ANDERSON, M. D.

S. P. WISE, M. D.

Americus

Recurrences of obstructive urinary symptoms, after a period of comparative freedom, following prostatectomy in the hands of our best urologists deserve our serious consideration. Unhappy as this situation may make us, it must be met openly and with determination to make the proper corrections to give our patients that comfort that is due them. This situation is one that demands absolute fairness and justice to both patient and surgeon, because both have labored under the impression that symptoms of urinary obstruction have been permanently relieved following a satisfactory prostatectomy. The patient is surprised when he is confronted with the statement from his no less surprised surgeon that he (the patient) has another growth that necessitates a major surgical attempt to give relief. This is another experience that not only carries a physical risk, but a financial burden. These cases have heretofore, been talked of only in low breath to a friend or friends and in talking to several of my surgical colleagues I find nearly all, if not all of them, have had patients with recurrences.

CASE REPORT

J. R. F., age 71, farmer, came in complaining of inability to void, necessitating self catheterization for several months; pain in the lower abdomen with each filling of the bladder. The present illness began twenty years ago with dribbling of urine, associated with urgency and frequency of urination. These symptoms grew worse as time went by, and in 1921 a suprapubic, two-stage prostatectomy, with the removal of a small bladder stone, was done in another city. An uneventful recovery from the operation was followed by 4-5 years of absolute freedom from symptoms of urinary obstruction. As time went on the clouds of urinary obstruction began to gather again, and in 1926 definite symptoms, such as a small urine stream, urgency of urination, associated with some pain on urination, were definitely established. These symptoms grew worse and six months ago the patient had resigned himself to a catheter life, which he has been following since. Physical

examination shows an elderly man, moderately emaciated, with a blood pressure of 170-100. There was an enlarged smooth prostate gland, felt by rectal examination, and a slightly distended bladder. Urinalysis showed a specific gravity of 1.017—albumen trace—sugar negative—casts few—pus cells many—with a colon bacilli present. Cystoscopic examination showed moderate trabeculation of the bladder, with a large prostate, especially the right lateral lobe. The P. S. P. test returned 25 per cent first hour; 25 per cent second hour. The blood chemistry was creatinine 2.5, urea 15, non protein nitrogen 30.

On April 8, 1930, a suprapubic prostatectomy was done and the patient made an uneventful recovery. On May 21, 1930, he writes that "my bladder hasn't leaked in twelve days, and I am having no trouble with it." This has been confirmed several times since by letter.

What is the cause of recurrence of prostatic hypertrophy and how to prevent it is our problem just now. There are several theories—(1) Takahashi reports a case and relates that many authors claimed recurrent prostatic hypertrophy an impossibility, protesting that all the prostatic tissue had not been removed at operation. He claimed that the prostatic capsule is not in reality a capsule, but is composed of flattened glandular cells capable of regeneration when the pressure of an enlarged prostate is removed. This observation was confirmed by Hedinger, who found at autopsy two recurrences, two and four months after prostatectomy. This is not the result of malignancy. (2) Frudenberg, in 1909, demonstrated three specimens from patients who had died after prostatectomy, showing gland tissue in the capsule. This observer thinks that these gland growths are small adenomata to begin with and capable of growing in time into tumors like the original growth. If this be true, then all men doing prostatectomies should be extremely careful not to leave a small piece of tissue within the capsule. We suggest here that these recurrences may be the result of a small piece of prostatic tissue being forced into the periprostatic tissues through a rent in the capsule, beginning its growth upon removal of the prostatic pressure. A perfectly clean appearing capsule may eventually be a recurring prostate. That this condition is comparatively frequent is shown by the fact that there are cases reported by many writers. (3) Bransford Lewis and Grayson Carroll have brought the literature up to date in a

splendid article that has dealt with all phases of the subject, reporting one case. (4) Young reported three cases. (5) Eisendeath and Rolnick classify recurrences as true and false, the false being the result of left over nodules, true the actual regeneration of the gland.

This condition is one that should cause no element of suspicion in the consulting surgeon's mind, as it is certain to come to all surgeons sooner or later. There is just a possibility that one may incriminate an innocent able surgeon by some unjust criticism along this line.

TREATMENT OF TYPHOID WITH BARIUM CHLORIDE*

W. G. ELLIOTT, M. D.
Cuthbert

There have been various drugs used in the treatment of typhoid fever and I think it is generally considered by the profession that none of them do a great deal of good. The usual treatment being a high calorie, easily digestible diet, fluids liberally, and rest in bed, with good nursing care.

I had a case of typhoid fever about the first of July, 1930, and was treating it along the above lines as near as possible. The patient seemed very sick and the outlook was bad. I decided to see if I could get any new information on the subject, so I began looking through the Year Book of Medicine for 1929, and saw a short article on the treatment of typhoid with Barium Chloride. This stated that in 1908, a Frenchman, K. Routkevitch, demonstrated that barium salts produce vaso-constriction, with rise in blood pressure and stimulation of the vagus nerve and myocardium. On the basis of these facts he began the administration of barium chloride to thirty-five patients with typhoid fever and the results were good. The toxemia disappeared, the appetite returned, and it was difficult to tell whether these patients had typhoid. One patient died of hemorrhage and one of pneumonia. The fever was lowered at first and then rose slightly and went down

gradually. He verified the action of the drug by interrupting its administration several times and found that the patients became worse and the fever rose, however, improvement was noted again when the barium chloride was resumed.

After reading this, I decided to give barium chloride to my patient. He had been sick about three weeks at the time and was very sick, running a high fever. He began to feel better within twenty-four hours. His fever decreased at first then rose again, but gradually came down. Although he ran fever for about two weeks longer, he felt good, ate well and had the appearance of not being very sick.

Since then I have had four other typhoid patients that were given barium chloride as soon as a positive diagnosis was made and they have all shown a similar response and the course of the disease was not as long as in the first patient. They all appeared to have rather severe cases until they were started on the drug. On one of the cases I purposely discontinued the drug for two or three days, after he had been taking it for about one week, and he became worse, the fever going higher, appetite becoming poor, and the patient looking very sick again. When the drug was resumed he began to improve. One of these patients had several hemorrhages from the bowels and it was thought best to discontinue the barium chloride for a few days. All food was stopped and morphine was given as necessary for rest. After forty-eight hours food was resumed and after four days barium chloride was resumed. He has gotten along nicely since that time and is just about well.

I have two other cases who have had typhoid fever about fourteen days. They are taking barium chloride and seem to be getting along fine.

All of these cases were known typhoid infections, as the State Board of Health Laboratories obtained the typhoid bacilli from the blood of all seven. All of these cases were negroes and most of them had very poor hygienic surroundings and poor nursing care.

The dosage of the drug should be started at 1½ grs. three times a day and increased

*Read before the Randolph County Medical Society, Cuthbert, Ga., September 4, 1930.

gradually up to 6 or $7\frac{1}{2}$ grs. The largest dose I have given has been 6 grs.

The patients were encouraged to eat a high caloric bland diet, take plenty of water and butter milk.

I do not think my few cases are enough to draw any definite conclusions from, but I feel that they have all benefited from this treatment and I think it is worth trying further.

PHRENICLASIS

Pinching Phrenic Nerves for Uncontrollable Hiccough

Case Report

M. J. EGAN, JR., M.D.

Savannah

Avulsion of the phrenic nerve or nerves has been practiced in pulmonary tuberculosis, either alone or as a preliminary to artificial pneumothorax or thoracoplasty. These nerves have also been injected with alcohol and novocaine for hiccough. Pinching of both nerves, at the same operation with an artery clamp for hiccough, no doubt has been reported, but I have been unable, in my search of the literature, to find any reference to this. The following case is offered.

CASE REPORT

A male, age 48, admitted to hospital November 16, 1930, with symptoms of intestinal obstruction. His previous history was interesting in one particular only, i. e., that six months previously he had contracted acute gonorrheal urethritis, and about one week afterwards began having acute pain all over his abdomen, accompanied by vomiting and fever. This pain necessitated his remaining in bed for about two weeks, when he nearly died. Has had slight soreness in abdomen ever since.

At operation, under spinal anesthesia, found an old plastic peritonitis which had loosely bound all the coils of small intestine together with an acute kink in the jejunum. This was liberated. The other abdominal organs were normal, including the appendix. Patient was recovering normally, when, on the fourth day, he began hiccoughing. This got progressively worse, until, on the third day it became incessant and rapid and for forty-eight hours there was no cessation, night or day. Every known remedy was used, without result. On November 26 patient was in extremis with pulse 140 and very weak and irregular, temperature 97, skin cold and clammy.

Under local anesthesia I first exposed and pinched the right phrenic nerve, locking a small artery clamp to its fullest extent on the nerve trunk. There was no appreciable change in the hiccough. The left phrenic nerve was then exposed and pinched in like manner with immediate cessation of hiccoughing, with thoracic breathing without distress. The patient made a steady improvement without hiccough and was discharged three weeks afterwards in good condition. The Fluoroscope at this time showed, much to my surprise, a normally functioning diaphragm.

COMMENT

The observations of most interest in this case are:
1st. This man most probably had had a peritonitis of gonorrheal origin.

2nd. That the phrenic nerve can be paralyzed suddenly without any great respiratory distress.

3rd. That pinching the nerves does not necessarily sever the neuraxes of the nerves, as they could not have completely regenerated in three weeks, and therefore they were only injured enough to interrupt the nerve impulses.

Having not found a name for this procedure I have called it "Phreniclasis."

CHANCROID*

Personal Advice to Patient

1. Keep in mind that chancroid is always due to venereal infection and is easily communicated to others.
2. It is most commonly conveyed from one person to another by sexual intercourse, but may be communicated by other means.
3. To avoid this, follow these rules:
 - (a) Burn all soiled dressings.
 - (b) Use all care in handling dressings not to soil the clothing or hands.
 - (c) Wash the hands carefully with soap and water after changing dressings and also after each urination.
 - (d) Cleanse carefully any basin, lavatory or bath-tub after using. The use of public bath-tubs or tanks is prohibited.
 - (e) Have no sexual relations.
 - (f) Depend upon the doctor and not yourself to know whether you are cured.

*The law requires that these instructions be given to the patient.

FUNCTION OF ROUND WINDOW

Walter Hughson and S. J. Crowe, Baltimore (*Jour. A. M. A.*, June 13, 1931), describe experiments in which pressure applied on the round window membrane of the anesthetized cat increased the clarity and volume of the spoken voice and practically all pure tones between 512 and 4,096. This phenomenon occurs equally well in normal and in pathologic ears. The secondary tympanic membrane apparently acts as a safety valve to protect the structures of the inner ear and, owing to its mobility, absorbs a large percentage of the sound impulses that reach the cochlea.

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA
Devoted to Welfare of Medical Association of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

JULY, 1931

TOXIC REACTIONS CAUSED BY THE DERIVATIVES OF BARBITURIC ACID

Physicians are being confronted by an increasing number of cases manifesting toxic reactions due to the derivatives of barbituric acid. The fact that these preparations produce toxic reactions and in some cases are habit forming is being overlooked. Available to the public is a large group of these preparations. Notably—barbital, phenobarbital, ipral, amytal, dial, phenadorm and neonal, which are accepted by the Council on Pharmacy and Chemistry of the American Medical Association, and allonal, which is not a council accepted drug.

In general the action of these drugs is sedative and hypnotic. They are eliminated by the kidneys, and produce no accumulative action. They produce a lowering of temperature, a slowing of respiration and act on the peripheral blood vessels causing a dilation. They have a selective affinity for the central nervous system and have an antispasmodic action.

These preparations are universally used for their sedative and hypnotic powers. Hauptman introduced phenyl ethyl barbituric acid in the treatment of epilepsy in 1912. Hofvendahl demonstrated that barbiturates are practical antidotes in cocaine poisoning. Finally the derivatives of barbituric acid have gradually assumed a place of importance in the field of anesthesia.

The toxic manifestations resulting from the use of these drugs are of two types: 1. A toxic reaction resulting from the therapeutic dose, apparently having no relation to the dose and due to an idiosyncrasy to the drug. 2. Poisoning from overdosage.

Lundy, in reviewing the literature prior to 1930, reported the following symptoms of poisoning from diethyl barbituric acid (veronal):

1. Cutaneous eruptions. 2. Coma or somnolence. 3. Disturbances of the eye. 4. Pyr-

exia. 5. Disturbances of the nervous system. 6. Disturbances of the respiratory tract. 7. Urinary disturbances. 8. Acceleration of the pulse rate. 9. Vertigo. 10. Cyanosis.

The manifestations of toxic reactions vary from the mildest reaction of lassitude, malaise, drowsiness and giddiness, which many patients complain of a few hours after taking barbitals, to profound coma or death. Meninger has described two general types of skin reaction: 1. Urticarial wheals and itching, probably a sensitization reaction, and, 2. A toxic reaction characterized by a measles or scarlatiniform maculo-papular erythema. Lesions are often present in the mouth. The onset of this rash in the reported cases has varied from one to 86 days after the beginning of the drug. The eruption usually disappears with a fine branlike desquamation and occasionally leaves a pigmentation of the skin. After this skin rash clears up, an attempt to renew barbital therapy usually produces a recurrence of the eruption.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.

Derivatives of barbituric acid have long been known to be habit forming. Sands classified those acutely poisoned as belonging to the manic depressive group and the chronic users as being of the constitutional and psychopathic inferior group.

There is no intention to discredit this valuable group of drugs. However, it is desired to call to the attention of physicians their responsibility in prescribing these drugs. They should be obtained only through a prescription and should be prescribed by the chemical name.

M. S. D.

The Jour. A. M. A., June 27, 1931, directs attention to the increased prevalence of rabies in Southern California. It states that since 1910 and to date in 1931, 7,748 cases of rabies have occurred in animals. Since 1899, seventy-eight human deaths, two of these occurring only recently in children. In Southern California 275 cases in animals have occurred since January 1st, resulting in one human death. The presence in any community of this comparatively easily eradicated disease indicates that the community or its organized authority is not doing all that should be done.



ELMORE CALLAWAY THRASH, M.D.,
F.A.C.P., ATLANTA

1868-1931

University of Louisville School of Medicine, Louisville, Ky., 1891.

Member of the Fulton County Medical Society, Southern Medical Association, Medical Association of Georgia, House of Delegates of the American Medical Association, American College of Physicians, Radiological Society of North America, American Medical Association, Masons, Shrine, and Ponce de Leon Baptist church.

Councilor of the Medical Association of Georgia, Chairman of Publication Committee and Committee on History.

Past President of the Chattahoochee Valley Medical and Surgical Association, Fulton County Medical Society, and Medical Association of Georgia, 1921-2.

Professor of pathology and bacteriology of the Atlanta School of Medicine, 1905-1914; professor of diseases of the chest of the Atlanta Medical College, 1914-1917; on the staffs of the Grady Hospital, Crawford W. Long Memorial Hospital and Clinic, and the Georgia Baptist Hospital.

AMERICAN MEDICAL ASSOCIATION PHILADELPHIA SESSION

The eighty-second annual session of the American Medical Association held in Philadelphia June 8-12 was one of the largest and most successful in its history. Seven thousand Fellows were in attendance. These, together with their wives, other members of their families, commercial exhibitors and visitors brought the total attendance up to over ten thousand. The Medical Association of Georgia was represented by 44 Fellows whose names are given below.

The House of Delegates, the legislative body of the Association, was called to order at 10 o'clock Monday morning, June 8, by the Speaker, at which time it received reports from the Secretary, Board of Trustees, Bureaus, Councils, standing and special committees. The delegates from Georgia, Drs. E. C. Thrash, William H. Myers and O. H. Weaver, were on hand for the opening meeting and all subsequent meetings of the House. Georgia was again honored by having Dr. E. C. Thrash made chairman of the important Reference Committee on Amendments to the Constitution and By-Laws. The secretary reported the membership of the Association on June 1st exceeded 100,000, the largest in the history of the Association. Of these more than 65,000 were on the Fellowship roster. Georgia was credited with 1763 members and 705 Fellows for the year 1931.

The report of the Board of Trustees covered sixty-one pages in the Handbook and hence can only be briefly summarized here. Among other things it called particular attention to the marked increase in the work of the Association which now requires the services of more than 500 full-time employees in the headquarters building in Chicago. The gross earnings of the Journal were \$1,773,220.18, while the Journal operating expenses were \$993,174.24, leaving net earnings from the Journal of \$780,045.73. The miscellaneous income was \$48,010.80 and Association income \$47,097.07, making a total gross income of \$875,153.80. All expenses amounted to \$465,428.16, leaving a net income for the year 1930 of \$409,725.64. Many additions and improvements have been made in the Association's physical equipment. A new rotary press with a capac-

ity of 96 pages was purchased at a cost exceeding \$70,000 and is now in operation. The sum of \$750,000 has been set aside as the nucleus of a building fund to which will be added more from time to time in order to erect a building sufficiently large to care for all of the activities of the Association. The net worth of the Association, December 31st, 1930, was \$2,802,369.63.

The Scientific Assembly of the Association consisted of fifteen sections at which about 300 papers were read and discussed. All of these sectional meetings as well as the commercial and scientific exhibits were housed in the new Municipal Auditorium. In the section on Surgery, General and Abdominal, Dr. D. C. Elkin of Atlanta, read a paper on "Subphrenic Abscess" and in the section on Nervous and Mental Diseases, Dr. E. F. Fincher, Jr., of Atlanta, read a paper on "Epileptiform Seizures of Jacksonian Character: Analysis of One Hundred and Thirty Cases." Dr. F. K. Boland of Atlanta, served as Vice-Chairman of the section on Surgery, General and Abdominal, and Dr. W. A. Mulherin of Augusta, as a member of the Executive Committee of the section on Diseases of Children.

There were more than 400 scientific exhibits of unusual merit demonstrating a large amount of original work. The following awards were made for exhibits of individual investigations:

The Gold Medal to Jacob Furth, Henry Phipps Institute, University of Pennsylvania, Philadelphia, for original investigative work on experimental leukemia and excellence of presentation.

The Silver Medal to Bedford Shelmire, Baylor University of Medicine, Dallas, Texas, and W. E. Dove, U. S. Bureau of Entomology, Charleston, S. C., for original work on the spread of typhus fever by the tropical rat-mite and excellence of presentation.

The Bronze Medal to Eliot R. Clark, E. L. Clark, J. C. Sandison, R. G. Williams, H. T. Kirby-Smith, R. O. Rex, W. J. Hitschler, J. H. Smith and R. G. Abell, Department of Anatomy, University of Pennsylvania School of Medicine, Philadelphia, for original work

on the growth of living tissue as seen in artificial chambers introduced into the rabbit's ear and excellence of presentation.

In the Scientific Exhibit the Emory University Group was represented by Drs. W. W. Anderson, Roy R. Kracke and Jack C. Norris. Dr. Anderson showed photographs of clinical conditions in children; Dr. Kracke, complement fixation in blood cultures, and Dr. Norris, types of pathogenic fungi producing uncommon lesions.

The following officers were elected for 1931-1932:

President-Elect—E. H. Cary, Dallas, Tex.

Vice-President—George C. Yeager, Philadelphia.

Secretary—Olin West, Chicago.

Treasurer—Austin A. Hayden, Chicago.

Speaker of the House of Delegates—Friedrick C. Warnshuis, Grand Rapids, Mich.

Vice-Speaker of the House of Delegates—Albert E. Bulson, Fort Wayne, Ind.

Board of Trustees (term expires 1936)—Thomas S. Cullen, Baltimore.

Judicial Council (term expires 1936)—Walter F. Donaldson, Pittsburgh.

Council on Medical Education and Hospitals (term expires 1938)—Dean Lewis, Baltimore.

Council on Scientific Assembly (term expires 1936)—John E. Lane, New Haven, Conn.

The next annual session of the Association will be held in New Orleans, La.

The following members of the Medical Association of Georgia were registered at this session:

Bickerstaff, Hugh J., Columbus
 Bunce, Allen H., Atlanta
 Byrd, Thomas Luther, Atlanta
 Boland, Frank K., Atlanta
 Cason, William Martin, Sandersville
 Dexter, Amory, Columbus
 Dillard, G. J., Columbus
 Dougherty, Mark S., Jr., Atlanta
 Equen, Murdock Sykes, Atlanta
 Elkin, D. C., Atlanta
 Fountain, James Andrew, Macon
 Franklin, R. C., Swainsboro
 Fincher, E. F., Jr., Atlanta
 Grove, Lon, Atlanta
 Holliday, Paul L., Athens
 Hall, Charles E., Jr., Atlanta
 Harrell, Henry Pierce, Augusta
 Herman, E. C., LaGrange

Hesse, Herman W., Savannah
 Jones, Jack Walker, Atlanta
 Kracke, Roy R., Emory University
 Kandel, Harry Milton, Savannah
 Ketchin, Samuel C., Louisville
 Levington, Henry L., Savannah
 Little, Robert N., Summerville
 McAfee, J. C., Macon
 Myers, William H., Savannah
 Maner, Edwin N., Savannah
 Morrison, Arthur A., Savannah
 Mulherin, W. A., Augusta
 McGee, H. H., Savannah
 McRae, Floyd W., Atlanta
 Norris, Jack Clayton, Atlanta
 Pruitt, M. C., Atlanta
 Roberts, M. Hines, Atlanta
 Roberts, Stewart R., Atlanta
 Righton, H. Y., Savannah
 Swint, Roger C., Milledgeville
 Thrash, E. C., Atlanta
 Usher, Chas., Savannah
 Walker, Sidney, Dublin
 Weaver, O. H., Macon
 Wood, J. A., Atlanta
 Wise, S. P., Plains

SO-CALLED MEDICAL COMPLICATIONS OF PREGNANCY

Phil A. Daly and Solomon Strouse, Chicago (*Jour. A. M. A.*, May 16, 1931), state that formerly, when the emphasis was placed on the obstetric point of view, there developed a paradoxical philosophy of therapy. A case of organic heart disease or of diabetes mellitus in which a surgical condition affecting the kidney developed remained primarily a medical case with surgical complications. But a woman with organic disease who became pregnant immediately was treated as a case of pregnancy with medical complications. This position no longer is tenable; on the contrary, the medical side of the combination should become the paramount issue, the pregnancy the complication. In their paper they maintain this thesis, using heart disease, disturbances of the thyroid gland and diabetes as illustrative examples to prove that the pregnant woman with so-called medical complications can be better studied, better diagnosed, and better treated when the emphasis is placed on the medical aspect. For the purpose of more complete medical study, a ward in the Lying-In Hospital was obtained and outpatient clinics were established both in the hospital and in the dispensaries. In the outpatient work, every patient suspected of having the slightest aberration from the normal medical aspect was referred to the medical clinic. The obstetricians made no effort to determine whether a heart murmur was organic, nor would they make decisions regarding the significance of a glycosuria or a tachycardia. In the hospital the same principal was adopted—of referring to the medical clinic any abnormality.

"EYE DOCTORS"

An intelligent farmer, the father of five young children, complained to his local physician that his eyesight was gradually failing. The physician said, "You need glasses. Go over to see 'Dr.———' and he will fix you up." The patient went to see "Dr.———", obtained a pair of glasses, but when he saw little improvement in his vision he returned and obtained a second and, finally, a third pair of glasses. Eventually when he consulted an ophthalmologist he was practically blind from glaucoma. His wife and little children are now trying to carry on the farm work and wait on him. "Dr.———" was not a physician but an "Eye Doctor".

A bright boy of eight had trouble in reading and complained of inability to see clearly. On the advice of the teacher his father took him to an "Eye Doctor" and bought him a pair of glasses. When finally seen by an ophthalmologist he was totally blind in one eye and could barely see enough with the other to get around. He had optic atrophy due to syphilis.

Many more cases such as these might be cited but this particular comment was occasioned by the fact that a nurse reported on what "wonderful treatment" she was receiving from an "Eye Specialist". In fact, he had found the real cause of all of her trouble and was on the road to rapid recovery. Upon investigation it was found that, although her "Eye Specialist" had an elaborate office in a downtown office building and had "Dr." prefixed to his name, he is not a physician but an optometrist. He collected \$25.00, but an ophthalmologist, whose services were given free, had to be called upon to repair the damage done.

Ophthalmology is a branch of the practice of medicine—just as roentgenology is a branch of the practice of medicine. Physicians who send their patients to "Eye Doctors" to have glasses fitted and eyes treated and those who send patients to "X-ray technicians" for diagnosis and treatment are in fact consulting with laymen. People will continue to consult laymen, but physicians can refuse to be accessories to "the practice of medicine without license".

MILIARY TUBERCULOSIS OF SPLEEN WITH THROMBOPENIC PURPURA HEMORRHAGICA

According to Ellis Kellert, Schenectady, N. Y. (*Jour. A. M. A.*, June 27, 1931), tuberculosis of the spleen is uncommon considering the total number of tuberculous individuals, and even more rare is its association with purpura hemorrhagica.

GEORGIA STATE NURSES ASSOCIATION

Officers

President—Miss Lucia Massee, R. N., Cuthbert
First Vice-President—Miss Dora A. Kershner, R. N., Macon.

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Executive Secretary

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Headquarters

131 Forrest Avenue, N. E., Atlanta.

FACING THE FACTS*

JANE VAN DE VREDE,† R.N.
Atlanta

"A liberal education, in the sense of training the powers of the mind and a technical training for skill in the arts and crafts—these are the two great sources of human usefulness and happiness that organized education aims to open up to every member of the body politic. The ability to think clearly and the ability to do some useful service with skill and precision."

This quotation from a report of the Carnegie Foundation for Teaching is especially significant to the physicians and nurses. Capacity to think and skill to serve. Are these not the aims of every member of the professions to which we belong?

To attain this for every member, standards of education and performance must be set up.

In the struggle upward the medical profession is practically one generation in advance of the nursing profession, and has been beset only with the handicaps inherent in its own group and in those of the body politic.

But at the very outset, the advancement of the nurse as an individual, or as a member of an organized profession, is made more complex because of the fact that nursing is less independent than many of the other service professions, affecting and being responsible not only to the public it serves, but peculiarly responsible to and for the profession of medicine. Its relations have been mostly studied and dealt with in this light. Advances have been made through the sympathy, understanding and support of the medical profession, and more often its retrogression, or failure to advance, has been directly attributable

to the opposition of members of the medical profession and organized medicine itself.

Recently, educators and prominent members of society are taking a hand in the matter and changes are taking place in the status and progress of nursing education.

In the words of Dr. Glenn Frank, "The profession of nursing is something more than a glorified maid service. By virtue of its strategic position in the field of medical practice, it takes its place among the accredited professions, and this means that sooner or later society must give to the professional education of nurses the same serious consideration it has given to the professional education of doctors, lawyers and engineers."

For the past five years a study has been undertaken to furnish nurses, physicians and hospitals with the facts they needed for thinking through and acting toward a solution of problems involved in the education and service of nurses. The facts collected by the Committee on the Grading of Nursing Schools are startlingly disturbing to all thoughtful persons.

Its first comparison between medical and nursing schools showed that while physicians early in 1900 took definite steps to raise their educational requirements, which resulted in a sharp decrease in the number of medical schools and medical graduates, in nursing apparently no such national policy has been undertaken. In 1900 there were 173 physicians and 16 nurses to each 100,000 in population. In 1920 there were 137 physicians and 141 nurses to each 100,000 of the population. In 1900, for every 1000 physicians there were 90 nurses; in 1920 for every 1000 physicians there were 1029 nurses. And in the last decade, even while this study has been going on, if Georgia figures are any criterion, the number of nurses has been steadily mounting in proportion to physicians.

In 1930 Georgia registered 375 nurses and 85 physicians.

*Address before the House of Delegates of the Medical Association of Georgia, Atlanta, Georgia, May 12, 1931.

†Executive Secretary of the Georgia State Nurses' Association.

We have learned beyond a doubt that there is no shortage of nurses, but an oversupply.

We learned also that the professional life of the nurse is much longer than we had supposed. We had generally accepted the statement often heard that the professional life of the nurse was between 12 and 15 years. But we have learned that for most nurses it is nearer 20 years.

Therefore, the only conclusion we can come to is that unless we reorganize nursing to use more graduate nurses and less student nurses, nursing faces demoralization!

In Georgia, during the months of January to March, 1931, there was a 13 per cent unemployment of nurses. What can be done about it?

Fourteen hospitals which maintained schools of nursing in the state during the past two years have reorganized their nursing services. Two closed their doors. During this period 468 graduate nurses were employed in Georgia hospitals, which during the same period in 1930, 371 were so employed; but the percentages were not affected since we had graduated and thrown into the ranks of the unemployed these 375 additional nurses in 1930.

This process cannot go on without danger to our whole hospital economic structure. Until our large institutions find a way to shift some of the nursing load of caring for patients from students to graduate shoulders, unemployment and demoralization will continue.

The theoretical part of the education of the nurse has been slowly changing to a more formal and academic type, while the methods of handling the practical part of her education have retained all of the elements of apprenticeship in most of the schools of the country and in all of them in our own state.

The condition of our schools as to theoretical and practical instruction presents an almost insurmountable problem, if the schools remain as 98 per cent of them now are—the service organizations for the care of the sick.

The welfare of the patient must remain the first and most important consideration. Not only should he receive the best care possible, but the most care at the least price possible.

All education is expensive and the education of the nurse is no exception. To have a faculty in a school of nursing is just as important as to have one in any other branch of higher education.

In one of the progressive colleges of the country, a cooperative arrangement was made with a nearby hospital to include a course of nursing during the regular six-year course—doing periods of theory and practice and theory alternately in the nursing school and

the college. It was found to be far too strenuous, since the theory of the school of nursing, while on the cooperative service from the college, was almost as great as the theory while at the college; hence the student was practically trying to take two college courses at one time, and naturally found it to be too strenuous.

We need the theoretical knowledge, and we must have the practical experience under supervision. That has been the nurse's greatest contribution to the care of the sick. Miss Geister, in her recent reclassification study in Washington, classically interpreted this in her report. She said, "Realistic knowledge of the work done by the nurses is often lacking by those who in one field or another classify nurses. Rather, their understanding of nursing seems to be confined to a limited knowledge of academic preparation required for admission to nursing schools, and the amount of theoretical subject matter included in the curricula of nursing schools. It is probable that they do not comprehend the value of the practical training in developing skill through repetition, in developing judgment through observation, in developing poise through purposeful action under emergent stress, and in developing ease with human beings through living close to them in the climaxes of their lives."

The facts being presented in the Report of the National Committee on the Grading of Nursing Schools are indeed challenging. We cannot escape their consequences by refusing to face them. Some of the facts brought out should help us to judge quickly whether schools in Georgia are far below, meet or are above average.

Eighty-six per cent of the schools of nursing concentrate into a three months' or a four months' preliminary course—basic courses in the sciences. This is a requirement in the State of Georgia, but one that has not been enforceable in schools where there is not an instructor or some one directly and chiefly concerned with carrying out the curriculum. Wherever a school is to be continued, as soon as possible an arrangement should be effected that would give a basic theoretical instruction in the first semester, with a corresponding shorter time on ward duty during such time.

In checking on experience available, the Committee states that of 1437 schools, 46 per cent neither give affiliation nor get it for their students. Fourteen per cent give affiliation to other schools, though six per cent of all the schools get affiliation as well as give it. The other 40 per cent need to secure affiliation from the 14 per cent of all schools that give it. This presents an almost insurmountable problem. There is not enough of cer-

tain types of experience easily available to the schools that need it. In Georgia, there are three schools offering affiliation to 13 schools, while out-of-state schools are being used for affiliation for four schools. Twenty-three schools are operating at present without affiliation, but in many of these affiliation should be sought for more experience in pediatrics, dietetics, special nursing including contagious disease nursing, tuberculosis nursing, nursing in mental disorders, etc. The report states that it is the opinion of the Committee that no hospital should undertake to operate a regular school of nursing unless it gives at least two years of sound, diversified educational experience in the home school.

The Committee believes that affiliation for clinical experience should occur only in the second or third years. Where it occurs during the third year, the student should return to the home school before receiving her diploma.

A full record of the work done by each student during periods of affiliation should be kept on file in the home school as a part of the student's complete record.

As to vacations allowed, one-half the schools allow six weeks, and one-fourth nine weeks, vacation. The reports indicate that longer vacations result in less time off for sickness. The Georgia Board feels that two periods at the end of the first and second years, of four weeks each, with one week midway during the freshman year, brings better results to the student and to the hospital than three weeks each year.

California studies made indicate increased health of students after four weeks' vacation periods were adopted.

The report shows also the theoretical work of students in the various subjects. Many schools give less than three-fourths of what the suggested curriculum of the National League of Nursing Education suggests. Georgia schools average below that. The curriculum as suggested averages one hour of theory to eight hours of practical work, including the preparatory period. One hour to twelve, excluding the preparatory period. Georgia schools average one hour of theory to thirteen of practice, including the preparatory period, and one hour of theory to 24 hours of practice, excluding the preparatory period.

No other technical school in our state bears such a record. And at that, the impression among the medical profession is that too much theoretical instruction is given to nurses!

Georgia schools rate sixth from the lowest in the country in providing reference teaching material or library facilities, and third from the lowest in providing graduate head nurse service and supervision to student nurses. In one-third of the schools of nursing of this

state, student nurses are placed in charge of floors, and no graduate head nurses are employed.

Nurses are sorely handicapped to meet these deeper responsibilities without study, reflection and maturity. Youth is one of the great handicaps of the modern nurse, as well as one of her great advantages. If our entrance requirements were raised to 21 or 22, the service to our sick in hospitals would be very greatly improved, and our students would realize at once some of the satisfactions and joys in service which at 18 they are too young and inexperienced to comprehend.

Moreover, the teachers in our schools of nursing are also too young. Nearly three-fourths of them are under 32 years of age. In no school of higher education can one find a similar situation.

The outlook in Georgia from certain viewpoints is very discouraging. While we are raising educational entrance requirements to a high school diploma, we have not advanced the type nor character of the faculty of our nursing schools, nor increased the number of teachers, to meet the needs of these academically better prepared students; nor arranged the courses of our schools so as to challenge the respect of this type of student.

Only 16 per cent of the teachers in nurse training schools have as much as one year of college education.

Dr. Burgess, in her recent address before the National League of Nursing Education, which just closed its 37th annual meeting under this roof (Biltmore), said: "The essence of leadership is the ability to be simple. We must start where the people are and take one step at a time."

Throughout the country the schools divide themselves into three groups. In the first group are more than half of all the schools. They have an eight-hour day, one health examination for each student. The poor schools are in this group.

In the next group, one-fourth of all the schools have in addition an eight-hour night, a 50-hour week, a three weeks' vacation, two health examinations for each student during the course; at least one instructor, one graduate head nurse, and one graduate nurse on general floor duty. Comparatively few of our Georgia schools are in this class, so these should be our immediate objectives.

The other fourth of the schools are in the third group, in which the class instruction is given during the eight-hour day. They have a 48-hour week, four weeks' vacation, one whole day of 24 hours off each week. They have at least two instructors with a Junior College preparation as a minimum; constant health supervision, and enough head nurses and graduate nurses on floor duty so

that the assignment of students to ward practice may be upon the basis of their educational needs, and not upon the economic needs of the hospital with which the school is connected.

When we have attained the objectives in group two, for all Georgia schools, then we may go on to the more idealistic conditions of group three.

One difficulty of the management of the curriculum is that it takes the student away from the bedside care of the patient; and the problem of preparation does not stop with graduation of the student nurse, for nursing is advancing in knowledge and must continue to do so, with changing medicine. Some systematic method of post graduate study and instruction must be devised that can be practically carried out, similar to our extension service and summer school courses for teachers, now practically required for the teacher who remains in the profession of teaching any length of time.

Also, some form of supervision for private nursing in the home is very much needed.

Let me suggest that standards of performance have been greatly influenced by our state medical and nursing organizations. May I quote from a recent publication—"A Compendium of Antioch Notes," by President Morgan of Antioch College?

"Almost every field has its organization, with a code of ethics and standards of practice determined by the more representative members. These associations do more than government compulsion to raise standards. The influence of standards voluntarily set by associates is a powerful force for the discipline of human conduct.

"A calling seldom develops high standards through individual action. Only where men unite to set standards for themselves do honor and pride of workmanship generally control.

"The exchange of opinion and experience that goes on in such associations is a great force for improving service."

Dr. Morgan further states: "The code of ethics of any profession or association expresses the desire to make the standards of conduct in that calling deserve the approval of all self-respecting men. A profession or an industry cannot be left to finally determine its own standards. In some way it must be made to harmonize with the interests of society as a whole."

To meet the needs of the patient has always been the prime consideration of the physician and the nurse, but too often interpreted in the physical sense only. They should be able to meet moral needs; to make their influence and actions count toward strengthening the patient's whole moral fibre, while the will

was overcome from exhaustion or pain, just as the needs of the body are met.

The primal determining factor in the selection of the young woman entering nursing, or the young man entering medicine, should hinge on their ideals. They do not deal with human nature at its best, nor even in its normal stride in life. They deal with it more often at its worst. There is, therefore, demanded of them a moral stamina equal to the needs of their own weaknesses and those of the patient as well.

In preparation for such service, the nurse needs an inheritance of culture and self control; a broad education such as a college may provide, broadening understanding and contact with numbers of people. As Mr. Morgan says: "Professional training is not enough. Before one becomes a professional man, craftsman or merchant, he needs to fix his deeper roots and more controlling loyalties in the all-inclusive profession of man."

How may our organizations accomplish these desired ends? By systematic, continuous, vigorous application to them. We need to use the latent leadership of our fine physicians and nurses; to put tools in their hands; to fix responsibility for action; to strengthen the weak spots in our organization fabric; to stop the gaps by new memberships in communities where there are physicians and nurses but not members; to keep the busy, hard-pressed members informed of the larger issues and world movements affecting our services.

This, the Georgia State Nurses' Association has attempted to do.

Communications have been addressed to our special hospitals, requesting that the preparation of our nurses be augmented by special courses in tuberculosis, in psychiatry, in pediatrics. Communications have been addressed to the Medical Association of Georgia for support of the Board of Examiners of Nurses which is responsible for standards in schools of nursing.

The friendliest attitude has been expressed, but nothing has happened. We have organized a committee in the State Nurses' Association to meet at the call of the Hospital Committee of the Medical Association. Requests have been referred to the committee through the Secretary-Treasurer of the Medical Association of Georgia but nothing has happened.

In my opinion, for the advancement of medical service as well as nursing service, these two committees should be active, working committees, meeting often and studying the ways in which the Grading Committee reports may be used to improve our knowledge of our own State situation, and formulate statements which can be used by our medical, hospital and nursing groups in mak-

ing wise and safe plans for the care of the sick in relation to service, education and economics. Such a committee might well concern itself with the all important ethical problems underlying our common service.

Facing the facts requires a great deal of tolerance, a great deal of courage and a genuine desire for self examination and improvement that all of us admire but few have the grim determination to pursue to accomplishment.

The main point is to say with Newton, "There's no contending against facts."

And with Emerson, "Why not realize your world? There never was a right endeavor but it succeeded. Patience and patience, we shall win at the last. Never mind the ridicule. Never mind the defeat; up again, old heart! There is victory yet for all justice!"

COMMUNICATION

Dear Miss Van De Vrede:

Thank you very much for the copy of the "Journal of the Medical Association of Georgia." You are to be congratulated in securing so much space for a report of nursing work in the medical magazine. I only wish other states could get as good co-operation as you manage to do.

ANNE L. HANSON, R.N., *Chairman,*
Committee on Distribution of Nursing Service.
June 24, 1931.
Buffalo, N. Y.

OBITUARY

Dr. Elmore C. Thrash, Atlanta; member; University of Louisville School of Medicine, Louisville, Kentucky; aged 63; died at his home on Boulder Crest Drive of heart disease on June 22, 1931. He was born and reared in Gay, Meriwether County, Georgia. Dr. Thrash was widely known as a physician and a gentleman of the finest traits of character. His ability was not only recognized throughout Georgia but by others who were fortunate in acquiring his acquaintance. He was one of the first to advocate the establishment of the State Board of Health and his efforts were largely responsible for the passage of such a bill and the appropriation of funds for its operation by the General Assembly of Georgia. For the past twenty years, he had been physician-in-chief on the staff of Grady Hospital. Dr. Thrash served as chairman of the Masonic committee to raise funds and build a Tuberculosis Hospital at Alto for tubercular children. He was chairman of the Committee on History to compile a History of Medicine in Georgia, which has been written. He served as a member of Council of the Association from the Fifth District for many years, and as President, 1921-22. Dr. Thrash was a member of the Fulton County Medical Society, Southern Medical Association, Fellow of the American College of Physicians, member of the American Medical Association,

Masons, Shrine, and the Ponce de Leon Baptist church. Surviving him are his widow, one daughter, Mrs. Harry Dobbs, Atlanta, and one granddaughter. Funeral services were conducted from the residence by Rev. Luther Rice Christie and interment in the village cemetery at Gay, Georgia.

Dr. Chas. James Clark, Chauncey; University of Georgia Medical Department, Augusta, Georgia, 1889; aged 74; died at the home of his son in Augusta on June 16, 1931. He was born and reared in Laurens County. After graduating in medicine, began practice at Chauncey. Dr. Clark was a man of sterling character and devoted to Christian work. He was esteemed by thousands of people who knew him. Surviving him are four sons, H. M. Clark, Augusta; H. J., Levi, and Rupert Clark, Detroit, Michigan; four daughters, Mrs. Adel Willis, Chauncey; Mrs. Gussie Pope, Florida; Mrs. Hesper Polk and Mrs. Mary Brown, Detroit, Michigan. Funeral services were conducted from his home in Chauncey, and interment in the city cemetery.

Dr. M. B. McAfee, Lester; Atlanta College of Physicians and Surgeons, Atlanta, Ga.; aged 81; died at the home of his daughter, Mrs. H. J. Beck, Lester, on May 30, 1931. Many untiring deeds of charity could be attributed to him and his ministry to the sick. Surviving him are four daughters, Mrs. H. J. Beck, Lester, Ga.; Mrs. W. M. Cannon, Milledgeville; Mrs. W. A. Bekham, Metter; Mrs. J. A. Maddox, Atlanta; one son, J. A. McAfee, LaGrange. Funeral services were conducted by Rev. Allen, of Albany, from the Mt. Enon Baptist church of Lester and interment was in the church cemetery.

Dr. William S. White, Fort Valley; member; University of Georgia Medical Department, Augusta, 1901; aged 51; died at a private hospital at Macon on June 12, 1931. He was one of the leading physicians of Fort Valley and surrounding section for more than twenty years and was mayor of Fort Valley at the time of his death. Surviving him are his widow, one daughter, Miss Vilulu White, Fort Valley; one brother, Dr. H. E. White, St. Augustine, Florida; one sister, Mrs. J. D. Persons, Monticello; his father, Dr. A. F. White, Flovilla. Funeral services were conducted from the residence by Rev. N. H. Williams and Rev. Roy Warwick. Interment was in Oak Lawn cemetery at Fort Valley.

BOOKS RECEIVED

Transactions of the College of Physicians of Philadelphia. The present volume of the Transactions contains the papers read before the College from January, 1930, to December, 1930, inclusive. Contains 299 pages. Third series, volume fifty-two. Publishers: College of Physicians of Philadelphia, 19 South 22nd Street, Philadelphia, Pa.

WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA OFFICERS

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CORRECTING PHYSICAL DEFECTS IN THE PRE-SCHOOL CHILD*

BENJAMIN BASHINSKI, M.D.
Macon

In opening this paper I would like to ask permission to read The Children's Charter, which is President Hoover's White House Conference on Child Health and Protection, recognizing the rights of the child as the first rights of citizenship, pledges itself to these aims for the children of America. To quote:

"I. For every child spiritual and moral training to help him to stand firm under the pressure of life.

II. For every child understanding and the guarding of his personality as his most precious right.

III. For every child a home and that love and security which a home provides; and for that child who must receive foster care, the nearest substitute for his own home.

IV. For every child full preparation for his birth, his mother receiving prenatal, natal and postnatal care; and the establishment of such protective measures as will make child-bearing safer.

V. For every child health protection from birth through adolescence, including: periodical health examinations and, where needed, care of specialists and hospital treatment; regular dental examinations and care of the teeth; protective and preventive measures against communicable diseases; the insuring of pure food, pure milk, and pure water.

VI. For every child from birth through adolescence, promotion of health, including health instruction and a health program, wholesome physical and mental recreation, with teachers and leaders adequately trained.

VII. For every child a dwelling place safe, sanitary and wholesome, with reasonable provisions for privacy, free from conditions which tend to thwart his development; and a home environment harmonious and enriching.

VIII. For every child a school which is

safe from hazards, sanitary, properly equipped, lighted and ventilated. For younger children nursery schools and kindergartens to supplement home care.

IX. For every child a community which recognizes and plans for his needs, protects him against physical dangers, moral hazards and disease; provides him with safe and wholesome places for play and recreation; and makes provision for his cultural and social needs.

X. For every child an education which, through the discovery and development of his individual abilities, prepares him for life; and through training and vocational guidance prepares him for a living which will yield him the maximum of satisfaction.

XI. For every child such teaching and training as will prepare him for successful parenthood, homemaking, and the rights of citizenship; and, for parents, supplementary training to fit them to deal wisely with the problems of parenthood.

XII. For every child education for safety and protection against accidents to which modern conditions subject him—those to which he is directly exposed and those which, through loss or maiming of his parents, affect him indirectly.

XIII. For every child who is blind, deaf, crippled or otherwise physically handicapped, and for the child who is mentally handicapped, such measures as will early discover and diagnose his handicap, provide care and treatment, and so train him that he may become an asset to society rather than a liability. Expenses of these services should be borne publicly where they cannot be privately met.

XIV. For every child who is in conflict with society the right to be dealt with intelligently as society's charge, not society's outcast; with the home, the school, the church, the court and the institution when needed, shaped to return him whenever possible to the normal stream of life.

XV. For every child the right to grow up in a family with an adequate standard of living and the security of a stable income as the surest safeguard against social handicaps.

*Read before the Woman's Auxiliary to the Medical Association of Georgia, Atlanta, Ga., May 14, 1931.

XVI. For every child protection against labor that stunts growth, either physical or mental, that limits education, that deprives children of the right to comradeship, or play, and of joy.

XVII. For every rural child as satisfactory schooling and health services as for the city child, and an extension to rural families of social, recreational and cultural facilities.

XVIII. To supplement the home and the school in the training of youth, and to return to them those interests of which modern life tends to cheat children, every stimulation and encouragement should be given to the extension and development of the voluntary youth organizations.

XIX. To make everywhere available these minimum protections of the health and welfare of children, there should be a district, county or community organization for health, education and welfare, with full-time officials, coordinating with a state-wide program which will be responsive to a nation-wide service of general information, statistics, and scientific research. This should include: (a) Trained, full-time public health officials, with public health nurses, sanitary inspection and laboratory workers. (b) Available hospital beds. (c) Full-time public welfare service for the relief, aid, and guidance of children in special need due to poverty, misfortune or behaviour difficulties, and for the protection of children from abuse, neglect, exploitation, or moral hazard.

For every child these rights, regardless of race, or color, or situation, wherever he may live under the protection of the American flag."

The time for the summer round-up has arrived, and in our opinion is an annual affair for all time to come. Medical inspection of pre-school and school children in the United States is relatively new. The first law that was passed in the United States relative to school medical examination was in Connecticut in 1899. Massachusetts in 1906 passed a mandatory law, which is the basis of most other bills passed in the forty states now organized for medical work in schools. Inspection is now mandatory in Massachusetts, New Jersey, Rhode Island, Colorado, District of Columbia, Louisiana, Minnesota, Pennsylvania, Utah, West Virginia, California, Maine, Indiana, Vermont, North Dakota, New Hampshire, Washington, Ohio, New York, Virginia, Maryland, Wyoming, Delaware, Florida, Georgia and North Carolina. Only a few states have made any provision for medical examination in the rural sections, and children in rural schools comprise more than one-half of the school population, and here the teachers introduce practically the entire health supervision.

Medical inspection may best be controlled by the department of health, especially as to communicable diseases, because it has specific authority, recognized by all the people and is ably supported by the laws of the States. On the other hand, in nearly all communities the Board of Education has very large funds and, too, the teachers are all interested in the children, and will cooperate. Medical inspection in schools was organized primarily to combat the spread of infectious diseases, not only in schools, but because these children would carry diseases into their homes.

In our round-up we should be on the look-out for carriers. A carrier is an individual who harbors communicable bacteria without presenting symptoms. Among those we find streptococcus carriers, pneumonia, diphtheria, influenza, poliomyelitis or infantile paralysis, meningitis and typhoid.

We have been laying so very much stress upon the preventive diseases in all of our campaigns and seemingly neglecting the teeth. It is most important that teeth of the first dentition be preserved in good condition until their work is done. How often do we see neglected temporary teeth, especially stain, caries, and abscesses—all neglected because mothers have been advised to leave them alone, since other teeth will soon erupt and take their place. It has been estimated that from 33 to 53 per cent of school children have dental defects.

Dr. Philip Von Ingen in his report to the White House Conference stated that the survey of the use of preventive measures among children under six years of age brought out many facts. He stated that of 14,000 city children in 146 cities, only 51 per cent have ever received a health examination, and most of these were made during the first year of life. For dental examination only 13 per cent had ever received them, the proportions varying from 42 per cent to one per cent. In our own county (Bibb), according to the annual report of our health officer, we find that in 1930, there were 10,152 notices sent to parents relative to dental conditions. The total number given mouth correction was 434, and the number of operations completed for children 3,048. In the school report we find the number of children inspected by nurses as 18,383, number of children having defects 9,056, defects found 16,523. Leading the list of defects found we find teeth which number 3,861.

Posture is as great a promoter of health as immunization. We should be on the look-out for spinal curvatures, round shoulders. Pre-school children should be taught the correct posture. All children should be examined barefooted, so as to detect flat feet, the

secondary results being fatigue, poor circulation, and often lumbar pain.

As to preventive medicine all of us are interested. We have at our command weapons of defense which have been proven almost 100 per cent positive and even so we still find in this enlightened world some who are opposed to all of them. This should not discourage us because in every community we will find a certain per cent who are opposed to any health measure. Ignorance and superstition must be fought so as to protect our children. In our round-up we must insist upon vaccination against smallpox, giving of typhoid vaccine, scarlet fever toxin, and toxoid.

Every year we have 55,000 cases of smallpox occurring in the United States. This alone proves that we must not neglect vaccination. Only in the larger cities is it now compulsory. Let us vaccinate every pre-school and school child in Georgia. England has a compulsory law, requiring vaccination at six months of age, France during the first year of life, so has Germany.

Contrary to general opinion, children of pre-school age have typhoid fever and therefore should be immunized against this horrible disease. Should we conduct a campaign just as energetically as we have diphtheria, we would soon eliminate typhoid. Encourage this preventive measure and lower the mortality. Immunization should begin at eighteen months to two years of age.

Scarlet fever is now classed as a preventable disease, having passed the experimental stage. We have just passed through one of the greatest epidemics of scarlet fever in some time, which of course has left behind many serious complications and a number of deaths. A child may be protected just as safely and for the same period of time as diphtheria. Help us to begin a campaign to eliminate this dreaded disease. It can be done.

Rapid strides have been made in the prevention of diphtheria, and though our efforts have been untiring we still find a large number of cases developing. In our county in 1930 we had 82 cases, of these 32 being in adults, with five deaths. We immunized over 4,000 children in 1930; 622 children of pre-school age were immunized by our Health Department. We now have at our command a preparation that is far superior to toxin-antitoxin, especially for children under six years of age. This is toxoid. The advantages are many: first, only two doses are required; second, quicker immunization, as we get 67 per cent during the first three weeks and 97 per cent the following three weeks; next, toxoid does not contain any serum and may be given freely to asthmatic children; another advantage is that if this

particular child should require any serum treatment of any nature in future years we will not have the danger of anaphylaxis, as they are likely to develop after being given toxin-antitoxin. We must enlighten the public that when the tonsils and adenoids have been removed, only one location of diphtheria is gone. Tonsillar diphtheria is the mildest and easiest to respond to treatment. Laryngeal diphtheria, or membranous croup, as well as nasal diphtheria, is more rapidly fatal and requires more energetic treatment.

In our school report for 1930 (Bbb County) we find the amazing number of throat defects as 3,634, a potential and actual source of danger to that particular child and the community. Infected tonsils and adenoids lead to many serious complications, and if not corrected early, to permanent damages, the most serious being rheumatism, often-times known as growing pains, having as its complication a most serious form of heart disease as endocarditis, leaving, if the child survives, a permanently damaged heart, or a confirmed cripple. Enlarged adenoids will lead to many complications, chiefly mastoid. Again enlarged adenoids will cause a stunted growth, as well as a deformed facial aspect.

In our round-up we have been paying too little attention to vision and other eye defects. In 1930, in our county, among 13,940 children examined by physicians, there were found 1,029 with defective vision and 529 with other eye defects. This alone will cause headaches during or after school hours, with its associated loss of time, as well as repeating studies, not to say anything as to the happiness of that individual child.

One defect that has been overlooked so often in our round-up and even in school age is defective hearing. Here again adenoid tissue plays a most important part. Parents of a child with poor hearing are to be pitied for they have a great responsibility, as hearing is second only to sight as a means of receiving information.

I. We have been very interested in physical ills, but have paid very little attention to mental hygiene, which is as important if not more important. A young boy was asked the difference between character and reputation. He replied, "Character is what you are, reputation is what people think you are." Some standard method should be devised for estimating the child's capacity for education. At the present, our best method is the Binet-Simon scale. This scale helps us measure the intelligence of the individual. It is most important that one versed in psychology conduct the tests. At any time that a teacher reports bad behavior or disobedience, or disinterest, the scale should be used. The same holds true if that particular child is lagging

in mathematics, reading, spelling, or language. Not only should the scale be used, but the environmental situation inside as well as outside the home should be studied. I shall interrupt myself to read an article, which, I think, typifies the environment with which most of our children have to contend:

II. "Listen, son:

"I am saying this to you as you lie asleep, one little paw crumpled under your cheek and the blond curls stickily wet on your damp forehead. I have stolen into your room alone. Just a few minutes ago, as I sat reading my paper in the library, a hot, stifling wave of remorse swept over me. I could not resist it. Guiltily I came to your bedside. There are the things I was thinking, son: I had been cross to you. I scolded you as you were dressing for school because you gave your face merely a dab with a towel. I took you to task for not cleaning your shoes. I called out angrily when I found you had thrown some of your things on the floor.

"At breakfast I found fault, too. You spilled things. You gulped down your food. You put your elbows on the table. You spread butter too thick on your bread. And as you started off to play and I made for my train, you turned and waved a little hand and called, 'Good-bye, Daddy!' and I frowned, and said in reply, 'Hold your shoulders back.'

"Then it began all over again in the late afternoon. As I came up the hill road I spied you down on your knees playing marbles. There were holes in your stockings. I humiliated you before your boy friends by making you march ahead of me back to the house. Stockings were expensive—and if you had to buy them you would be more careful! Imagine that, son, from a father! It was such stupid, silly logic.

"Do you remember, later, when I was reading in the library, how you came in, softly, timidly, with a sort of hurt, hunted look in your eyes? When I glanced up over my paper, impatient at the interruption, you hesitated at the door. 'What is it you want?' I snapped.

"You said nothing, but ran across, in one tempestuous plunge; and threw your arms around my neck and kissed me, again and again, and your small arms tightened with an affection that God had set blooming in your heart and which even neglect could not wither. And then you were gone, pattering up the stairs.

"Well, son, it was shortly afterwards that my paper slipped from my hands and a terrible sickening fear came over me. Suddenly I saw myself as I really was, in all my horrible selfishness, and I felt sick at heart.

"What has habit been doing to me? The

habit of complaining, of finding fault, of reprimanding—all of these were my rewards to you for being a boy. It was not that I did not love you; it was that I expected so much of youth. I was measuring you by the yardstick of my own years.

"And there was so much that was good, and fine, and true in your character. You did not deserve my treatment of you, son. The little heart of you was as big as the dawn itself over the wide hills. All this was shown by your spontaneous impulse to rush in and kiss me good-night. Nothing else matters tonight, son. I have come to your bedside in the darkness, and I have knelt there, choking with emotion, and so ashamed! It is a feeble atonement. I know you would not understand these things if I told them to you during your waking hours, yet I must say what I am saying. I must burn sacrificial fires, alone, here in your bedroom, and make free confession. And I have prayed God to strengthen me in my new resolve. Tomorrow I will be a real daddy! I will chum with you, and suffer when you suffer and laugh when you laugh. I will bite my tongue when impatient words come. I will keep saying as if it were a ritual: 'He is nothing but a boy—a little boy!'

"I am afraid I have visualized you as a man. Yet as I see you now, son, crumpled and weary in your cot, I see that you are still a baby. Yesterday you were in your mother's arms, your head on her shoulder. I have asked too much, too much.

"Dear boy! Dear little son! A penitent kneels at your infant shrine, here in the moonlight. I kiss the little fingers, and the damp forehead, and the yellow curl.

"Tears came, and heartache and remorse, and also a greater, deeper love, when you ran through the library door and wanted to kiss me!"

I do not know of a better shrine before which a father or mother may kneel or stand than that of a sleeping child. I do not know of a holier place, a temple where one is more likely to come into closer touch with all that is infinitely good, where one may come nearer to seeing and feeling God. From that shrine come matins of love and laughter, of trust and cheer to bless the new day; and before that shrine should fall our soft vespers, our grateful benedictions for the night. At the cot of a sleeping babe all man-made ranks and inequalities are ironed out, and all mankind kneels reverently before the living image of the Creator. To understand a child, to go back and grow up sympathetically with it, to hold its love and confidences, to be accepted by it, without fear or restraint, as a companion and playmate, is just about the greatest good fortune that can come to any man

or woman in this world—and, perhaps, in any other world, for all we know.

And I am passing this "confession" along to the fathers who may be privileged to read it, and for the benefit of all the "little fellers"—the growing, earth-blessing little "Jimmies" and "Billys," and "Marys" and "Janes" of this very good world of ours.

The child's personal characteristics are also important, especially as to energy and initiative; in other words is he rebellious or does he have a tendency to proceed with intelligence or independence? One should try to determine if there is any hidden conflict between desire and duty. Another point would be to determine if there is any indirect habitual association as showing interest in his surroundings or shutting himself away from others or hard to influence. We should always try to find if he is over-sensitive or over-conscientious.

The well-trained teacher can do so much with the child's disposition, especially temper. The most important thing in overcoming this tendency is to make the child understand the harm he derives from it. The child should be reasoned with between his tantrums as a physician talks over a medical problem with his patient. One successful teacher places her hand firmly and kindly on the shoulder of a boy who is enraged; another helps him bathe his face in cold water. Love and joy are as essential to normal development as sunlight is to a plant.

In conclusion, I should like to quote from an article by Russell Burkhard in *Hygeia* of March, 1931, he himself quoting from Arnold Gesell.

"Developmentally, the child is indeed rather a well-finished product when his six-year molars appear. The pre-school years are incomparably the period of most rapid and most fundamental growth, whether physical or mental. Biologically, the pre-school age is most important for the reason that it comes first. Psychologically, the pre-school years are basic because the foundations of the structure of personality are then laid. Medically, the pre-school age is critical because it exceeds all others in mortality and morbidity. Not only most of the defects of school children originated in the pre-school period, but also the mental. What is more important, most of these abnormalities are recognizable in the early years. Child consultation centers could be of significance in gathering data from the pre-school child for the public school."

REFERENCE

I. Hygiene of the School Age: Joseph E. Young, M. D. *Abt's Pediatrics*, Vol. 1.

II. Copied from reprint from "Valve World" by permission, Mead Johnson and Company, Evansville, Indiana.

NEWS ITEMS

The Terrell and Randolph Counties Medical Societies held a joint meeting at Cordray mill on June 5th. Dr. Guy Chappell, Dawson, read a paper entitled "Treatment of Eclampsia." A fish supper was served after the meeting.

Dr. B. C. Hale, Rossville, and Dr. J. P. Wood, Flintstone, entertained the physicians of Walker and Catoosa Counties at dinner at the Goodie Shoppe, Rossville, on June 5th.

The Third District Medical Association met at Cuthbert as the guest of the Randolph County Medical Society on June 17th. The scientific program consisted of the following titles of papers: "Clinical Symptoms and Treatment of Pneumonia," Dr. Hal M. Davison, Atlanta; discussed by Dr. V. C. Daves, Vienna; Dr. Herschel A. Smith, Americus; Dr. T. M. Adams, Montezuma; Dr. C. P. Savage, Montezuma. "Cancer of the Stomach," Dr. W. A. Selman, Atlanta; discussed by Dr. B. T. Wise, Americus; Dr. T. F. Harper, Coleman; Dr. Chas. Adams, Cordele. "Spinal Anesthesia," illustrated with moving pictures, Dr. J. C. Patterson, Cuthbert. Addresses by Dr. M. M. Head, Zebulon, and Dr. Arthur G. Fort, Atlanta. President-Elect and President, respectively, of the Association.

Write to the Secretary-Treasurer of the Association for information, if interested in a location for a physician.

The Governor's Staff, represented by Colonel J. C. Woodward, Chief Aide-de-Camp to the Governor, presented to the State of Georgia on June 26th a bronze tablet in honor of the services of Dr. L. G. Hardman, Governor of Georgia, 1927-1931. The tablet was accepted on behalf of the State by Hon. Geo. H. Carswell, Secretary of State. Dr. Allen H. Bunce, Atlanta, Secretary-Treasurer of the Association, presided during the ceremonies in the Supreme Court room. The tablet was unveiled by Dr. Hardman's youngest daughter, Miss Emma Griffin Hardman. Mrs. L. G. Hardman responded to the presentation address and honor conferred upon Dr. Hardman in his absence, he being confined at the Governor's Mansion from an infection of a foot.

The Randolph County Medical Society met at Cuthbert on July 3rd. Dr. J. O. Baldwin, Fort Gaines, read a paper entitled, "God, His Creation, the Doctor." Dr. F. M. Rogers, Cuthbert, gave a case report.

Dr. Allen H. Bunce, Atlanta, Secretary-Treasurer of the Association, was invited by the Dallas County Medical Society (Dallas, Texas), to attend a dinner honoring Dr. Edward H. Cary, President-Elect of the American Medical Association, on the evening of June 27th.

The New York State Department of Health in its Health News Service, entitled "Our Changing Conception of Health Work," makes a comparison of the work by a health officer fifty years ago and that of a modern officer, in part as follows: "If a health

officer of fifty years ago could come back and visit the office of an up-to-date health department he would find himself literally in a new world, scientifically speaking. Many of the things he considered most important in his day, he would learn, have been found to have had little or no effect on health. He would find the modern health officer—if he visited the right place—at the head of a staff of trained assistants, engaged in activities not even thought of in his day—public health nursing, child and maternal hygiene, public health education, laboratory diagnosis and research, sanitary engineering, and all the rest. He would find that instead of putting their faith in quarantine, placarding and fumigating, as he did—"locking the barn door after the horse was stolen"—they were applying scientific measures to the prevention of disease."

The United States Public Health Service has sent out official notice that the United States State Department has decided that our Government will participate in the Third Pan American Medical Congress and has designated several American physicians as delegates on the part of the United States to this Congress. The Third Pan American Medical Congress will be held in the City of Mexico, July 26th to 31st, 1931. This Congress is being held under the auspices of the Department of Public Health of the Mexican Government.

The Federal Food and Drug Administration, according to W. G. Campbell, Director of Regulatory Work of the U. S. Department of Agriculture, seized during May, 76 lots of proprietary remedies, 63 consignments of food, as well as varying stocks of crude drugs, fluid extract of ergot, substandard ether, and live stock foods and remedies, which were shipped or held unlawfully.

The California Medical Association at its recent annual meeting authorized the creation of a permanent Cancer Commission to represent the Association in all phases of the organized fight upon the increasing menace of cancer. Dr. Charles A. Dukes, Oakland, Chairman; and Dr. Alson R. Kilgore, San Francisco, Secretary.

The Sixth District Medical Society met at Indian Springs on June 24th. The scientific program was made up of the following titles of papers: "Ectopic Gestation, Approaching Term—Case Reports," Dr. W. W. Baxley, Macon; "Health Work in Schools," Dr. C. L. Ridley, Macon; "Esophageal Obstruction," A. M. Phillips, Macon; "Dangers of Delay in Duodenal Ulcers," Dr. Chas. C. Harrold, Macon; "Chronic Purulent Otitis Media," Dr. J. Allen Smith, Macon; "Miscellaneous Case Reports," by members; "Diagnosis and Treatment of Cardiac Arrhythmias," Dr. T. E. Rogers, Macon; addresses by Dr. Arthur G. Fort, Atlanta, and Dr. M. M. Head, Zebulon, President and President-Elect of the Association, respectively.

Dr. W. W. Battey, Augusta, has been added to the faculty of the University of Georgia Medical Department, Augusta, as Professor of Medicine. Dr. W. L. Moss, Baltimore, was elected Dean.

The United States Public Health Service in a recent

health news letter states that microscopic organisms aid in the natural purification of streams. That where reedbeds and ducks are found in abundance in their natural feeding grounds, it is known that they are attracted by the presence of food. In somewhat similar fashion certain microscopic animals are attracted by the presence of organic matter found in sewage, which serves as their food. Where these organisms are found, it is known that the water is polluted, for they will disappear when their food supply is exhausted. These minute organisms, which together with certain other microscopic forms of life, both animal and plant, are collectively called "Plankton," and they play a very important role in the process of natural purification of streams, the minute animals feeding upon the polluting organic wastes, and the microscopic plants giving off oxygen.

The Georgia Pediatric Society at its annual meeting on May 13th, elected the following officers: Dr. Chas. E. Boynton, Atlanta, President; Dr. Henry P. Harrell, Augusta, Vice-President, and Dr. Roger W. Dickson, Atlanta, Secretary-Treasurer.

BOOK REVIEW

Hypotension, by Alfred Friedlander, Professor of Medicine, University of Cincinnati College of Medicine. Medical monograph, volume thirteen, published by Williams and Wilkins Company, Baltimore, 1927. Pages 193. Price \$2.50.

The causes of certain types of hypotension and hypertension remain as baffling today as they did in 1905, when Karatkoff first described the auscultatory method of blood pressure estimation. More has been written about hypertension than about hypotension, but the latter subject has stimulated a voluminous literature. In this book, Doctor Friedlander has reviewed and analyzed the literature, recording established facts in logical sequence, and has indicated the phases of the subject which should have further study.

There is no single cause of hypotension. The book is a valuable reference book because of its scope. It is well written and should stimulate us to more research upon the complexities of hypotension.

E. A. BANCKER, JR., M.D.

BODY MECHANICS AND POSTURE

Robert Bayley Osgood. Boston (*Jour. A. M. A.*, June 13, 1931), emphasizes the importance of developing the body to its highest mechanical efficiency, to the end that the various complicated and correlated systems may function with the least amount of wear and the greatest amount of power. Body mechanics may be said to form the basis of all physical therapy, an irreducible minimum which must be satisfied if one is to expect remedial measures to be most fully effective. Of the surprising prevalence of faulty body mechanics and poor posture there can be no doubt. Of the close association of good body mechanics and good functional health and of poor body mechanics and poor functional health, the physiologic basis is sound and the clinical evidence is strong. The underlying causes of poor body mechanics need investigation.

COMMUNICATION

1910 TRANSACTIONS OF ASSOCIATION

To The Editor:

This Library lacks a copy of the 1910 Transactions of the Medical Association of Georgia, covering the 61st Annual Meeting of your Society. As we have had a call for this volume we write to ask if you could supply us with a copy, or advise where one could be obtained.

P. M. ASHBURN,
Colonel, Medical Corps, U. S. A.
Librarian, Army Medical Library.

Army Medical Library,
7th and B Streets, S.W.,
Washington, D. C.
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have been obliged to abandon same due to diarrheas or other unfortunate nutritional upsets, will welcome Mead's Dextri-Maltose with Vitamin B. This is a tested product with rich laboratory and clinical background and is made by Mead Johnson & Company, a house specializing in infant diet materials.

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SYPHILIS*

Personal Advice to Patient

1. Your disease may be communicated to others by means other than sexual intercourse.

2. It may be transmitted by any of the secretions of the body, but more especially by blood or blood serum oozing from raw mucous surfaces, such as cracked or sore lips, mucous patches in the mouth and throat, discharges from syphilitic ulcers and sores.

3. Never permit the slightest opportunity for other persons to come in contact with any of these secretions.

4. To avoid this, follow these rules:

(a) Use individual drinking cups and eating utensils. These should be sterilized by boiling after each use. Never use public drinking cups.

(b) Tooth brushes, pastes, powders or mouth washes used in caring for the teeth should be kept in separate containers. Brush teeth after each meal, and keep mouth clean. If you have bad teeth have them attended to by a dentist. Be fair to him and his next patient by telling him you have syphilis, so he may take precautions and not infect others.

(c) Use no razor or other articles used in shaving except your own, and permit no other person to use your shaving outfit. Shaving in a public barber shop is prohibited for one year after beginning of infection.

(d) Basins, lavatories, and bath-tubs used should be washed out thoroughly with soap and hot water after each use by you. Separate basins are to be used whenever possible. The use of public bath-tubs is prohibited.

(e) Use individual towels.

(f) Handkerchiefs, clothing, and underclothing, should be laundered separately. They must be immersed in boiling water or an approved antiseptic solution, as advised by the physician, before being added to other laundry.

(g) All dressings of sores or ulcers must be burned. Never leave them where they are accessible to flies.

(h) Never kiss others or permit them to kiss you.

(i) Sleep alone and practice continence.

(j) Follow your physician's advice. Do not cease treatment until he assures you there is no longer

*The law requires that these instructions be given to the patient.

danger of your transmitting the disease, and that your cure is complete.

(k) Do not be led astray by promises of hasty or permanent cure by advertised remedies. Cheap cures make miserable lives and expensive funerals. You gain nothing but bitter experience by deceiving yourself, and you risk the health of those nearest and dearest to you. Play fair with yourself and with others.

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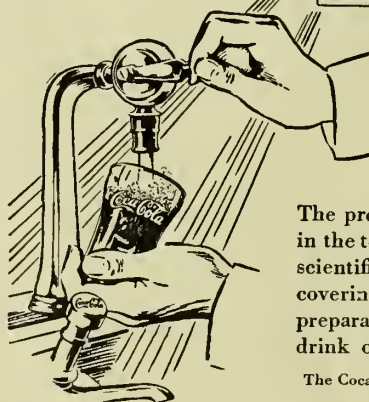


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MILLION A DAY—IT HAD TO BE GOOD TO GET WHERE IT IS

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ETIOLOGY OF MENTAL DISEASES*

GEO. L. ECHOLS, M. D.
Georgia State Sanitarium
Milledgeville

Mind is man's most distinctive organ. (White.)

The mind is just as liable to disease as any other organ of the body.

The most important consideration in any disease is prevention, and this must be based on a knowledge of causative factors.

The etiology of some physical diseases is still vague, and the same is true of certain mental diseases; however, we must keep in mind that the latter have not received attention and study to the extent of the former, both as to the number of workers and the length of time, since psychiatry is one of the newer specialties in medicine, and as a science is still young.

The first causative factor to be considered is heredity. The small number of children and the long duration of a generation handicaps studies along this line and data concerning ancestors is usually on a hearsay basis. I have never studied heredity among the sane; however, in mental cases, I have found insane ancestry very common. Reference to the literature shows a few comparative studies that indicate a worse heredity among the insane than among the sane.

If we consider mental or nervous diseases, alcoholism, apoplexy and suicide in the grandparents, parents, brothers, sisters, uncles and aunts, according to Diem 67 per cent of the so-called normal-minded would be regarded as having bad heredity, while 78 per cent of the insane would be thus burdened.

I have never been able to see, in my own mind, where "The Mendelian Theory" is

of any help in the studies of causative factors in mental diseases.

We must also keep in mind that most of the studies, that is, the comparative studies, as given on hereditary influence in mental diseases, are many years old. This is perhaps due to the fact that psychiatrists are giving more attention directly to the patient involved.

Strecker and Ebaugh say: "Many psychiatrists are beginning to resent the undue emphasis which has been placed on heredity in the field of psychiatry, and the comparative belittlement of other factors, such as environment, particularly the environmental influence of childhood, poisons, infections, endocrine imbalance and other considerations."

Henderson and Gillespie say: "Too much stress has been laid on the role of heredity in mental disorders, although it must be very great."

Alcohol: Several interesting considerations arise under the heading of alcohol as a causative factor in mental disease. Forel says that from some of the cities in Switzerland as high as 30 per cent of the asylum commitments were due to alcoholism, while in Georgia, for 1929, only 1.3 per cent were classed as alcoholic.

Combining all the statistics in the United States for 1910, we get 10.1 per cent and in 1922 this had fallen to 3.7 per cent. This reduction may be attributed to three factors, viz., prohibition; the difficulty of getting new cases into the state hospitals, due to the more recent overcrowded conditions, and to greater accuracy in diagnosis.

The overcrowded conditions in the state hospitals would lower the rate in the following way: Many of the alcoholic mental disturbances are of rather short duration. This is particularly true in delirium tremens, and partially true in acute alcoholic hallucinosis. Thus the patient either recovers or

*Read before the Medical Association of Georgia, Atlanta, Ga., May 13, 1931.

dies before he can be admitted to the state hospital.

In cities like New York and Boston, and particularly in the latter place, it is possible to have a rapidly functioning psychopathic hospital where any and all acute mental conditions may be carried, without delay, for examination and records. Under such conditions practically every acute alcoholic mental disturbance would be studied and recorded, hence their percentage of alcoholic psychoses would naturally be high, while in the Milledgeville State Hospital for the last two or three years, it has been almost impossible to get *acute* cases hospitalized, and when this is possible, there is usually much delay, the delay being sufficient for many of the alcoholics to have recovered from their mental disturbance, or to have died.

Fifteen and twenty years ago many cases were diagnosed as "alcoholic psychosis" which, at present, would be found to be cases of paresis, this being due to the new laboratory technique, in examination of the blood and spinal fluid. Also, in the past many cases were admitted and diagnosed as "alcoholic psychosis" the diagnosis being made on the admission examination, and later on the patients were found to have dementia praecox, but the diagnosis was never changed, as would more than likely happen at present.

Some excitements occurring in heavy drinkers are now recognized as cases of manic depressive insanity.

The above explanations are of importance when we undertake to consider the lowered percentage of alcoholic psychoses in the more recent reports.

We must also keep in mind that alcoholic indulgence is frequently a symptom of mental disease and when added to the disease produces a vicious circle, the alcoholism clouding and obscuring the underlying psychosis.

We must also keep in mind the mental defect which may be produced in children through alcoholic parents.

Syphilis: As a causative factor this condition is well understood, and is due to the direct attack on the brain and nerve tissue by the *treponema pallida*. The types pro-

duced are as follows: juvenile paresis, which is hereditary, the disease developing before the age of twenty; cerebral syphilis, which is more of an interstitial invasion of tissue, and is found in three forms, arterial, meningitic and gummatous; however, these may occur in combination. Paresis, general paralysis of the insane, or dementia paralytica, is more of a parenchymatous invasion of brain tissue, mostly cortical.

The statistics indicate that 5 to 15 per cent of asylum commitments are due to syphilis. I have made rather extensive studies of admissions at the Milledgeville State Hospital, and the conclusions are that about 6 per cent of the admissions are directly traceable to syphilis.

Drugs: Opium and its derivatives, the bromides, are the drugs usually taken over a prolonged period, which may produce a psychosis. This *usually* occurs in psychopathic or *unstable* individuals, and a delirium or hallucinatory episode, with fears, commonly results. Recent estimates show about a million drug habitues in the United States, and during 1929 the drug cases, so diagnosed, at the Milledgeville State Hospital, was about eight-tenths of 1 per cent.

Bacterial Infections: Such as typhoid, pneumonia, scarlet fever, etc., may produce delirious states, but this, to a great extent *seems to depend on the make-up of the individual*.

Exhaustions: The wisdom of the term "exhaustion psychosis" is questionable; however, it is not uncommon to hear the term, "break-down, due to overwork". Perhaps the strenuous efforts observed during such periods are the result of beginning mental disturbance, instead of the overwork producing the condition just mentioned. Henderson and Gillespie use an expression in this connection as follows: "Fatigue is secondary to emotional disturbance."

Some of the writers mention hemorrhage, prolonged labor, prolonged surgical operations, etc., as being possible etiologies of exhaustion psychoses. The writer recalls one case of hip joint amputation in which there was apparently no infection. This was followed by hallucinations and a fear reaction, during which time the patient got out of

bed, jumped from a second story window and fractured the other leg.

The writer also recalls examining soldiers who had served in the Philippine War, and after they cleared up mentally, told a story something like the following: They were out on a hike, the weather was very hot; the equipment carried by them was heavy; the food was not very good; they were unable to sleep, due to fear and poor accommodations, and at any time expected to be attacked by the natives, under which conditions they developed various types of delirium-like states. The picture certainly suggested an exhaustion psychosis.

At the Milledgeville State Hospital delirious states, due to bacterial infections and exhaustion, are labelled "psychosis with other somatic diseases" and in 1929 constituted about one per cent of the total admissions.

Pellagra: Is now known to be due to unbalanced diet, in which the protein content is low and certain vitamins are absent. Some of the older writers seem to be of the opinion that a big percentage of pellagrans develop mental disturbance; however, recent surveys, under the direction of the late Doctor Goldberger, indicate that perhaps less than four per cent of all pellagrans become psychotic.

Doctor Wheeler, one of his (Doctor Goldberger's) co-workers, later made a statement something like the following: "In endemic pellagra the death rate is about four per cent, and that the psychoses occurring in endemic pellagra would be nearly twice the death rate, or nearly eight per cent." The writer interprets this to mean that in these studies of endemic pellagra about eight per cent of the pellagrans develop psychoses.

About five per cent of the total admissions at the Georgia State Sanitarium for 1929 were attributable to pellagra.

Thyroid Disturbances: This condition produces two definite abnormal mental states:

Hypo-thyroidism, that is, a lowered secretion of the gland in infancy and early childhood, producing a condition known as cretinism, and most of such cases, when not treated, become cases of mental deficiency, of varying grades.

Hyper-thyroidism, usually occurs about

puberty, is much more common in the female sex, characterized by increased thyroid secretion, which is usually accompanied by an increase in metabolism, more or less enlargement of the thyroid gland, tremors, rapid heart and some protrusion of the eyeballs. The writer has seen a number of mental disturbances due to this condition. Most of them appear to be restless, talkative, sometimes irritable, nearly always confused, frequently making hospitalization necessary.

Senility and Arteriosclerosis: Many patients develop psychoses in which it is very difficult to determine whether the causative factor is due to senile changes in the brain, or arteriosclerosis of the cerebral vessels. At staff meetings at the Milledgeville State Hospital it is not uncommon for some members to diagnose one of these conditions and other members diagnose the other condition, in the same patient. It has been surprising that a large number diagnosed as "senile psychosis" had a cerebral hemorrhage within twelve months after admission. The etiology in the senile disturbance is mainly atrophic brain changes, the atrophy in the brain being analogous to the atrophy of the muscles, connective tissue and skin of the individual. In arteriosclerosis we may have an atheroma occurring mostly in the arteries at the base of the brain, or a more general diffuse sclerosis of the smaller arteries. These two conditions are responsible for more than 10 per cent of our admissions at the Milledgeville State Hospital.

Trauma: Following direct injury to the brain, different types of mental diseases are liable to occur.

Chorea: In the choreas, Huntington's type is usually followed by mental disease of a deteriorating type. This disease is always thought of in terms of heredity.

Manic Depressive Insanity: From our present knowledge hereditary predisposition appears to be a very important factor. In my experience there seems to be a type of mind in which emotional swings are noticeable. Today the individual is elated, happy, talking more than common; thoughts seem to come with ease, and at other times the same individual appears in the opposite emotional scale; however, neither extreme inter-

fering with the individual's usual natural reactions to life, occupation, etc.

In cases of manic depressive insanity it has been noticeable that under the stress of the death of a beloved relative or friend, financial reverses, or any strained circumstances, a manic depressive attack is liable to occur. At the same time we see many others go through similar periods of stress and strain without mental disturbance.

As an illustration of the above: A young woman has an unsatisfactory love affair on her hands. She does not desire to marry the particular individual. She makes up her mind to break off the engagement, and in doing so becomes pathologically happy, elated and restless, giving the picture of a manic attack. Or, an only relative dies, the individual on whom the patient is perhaps dependent, or one that is very much loved, following which a marked depression occurs, usually with suicidal tendencies.

From our experience we could give a long list of precipitating factors, but the predisposing etiology *must lie* in the hereditary predisposition, together with a tendency toward mood swings.

Dementia Praecox: Many attempts have been made to solve the cause of dementia praecox, but this condition is still obscure. Though much work has been done to relate this condition to organic changes of various types, nothing definite has been accomplished from an organic viewpoint. Just what part heredity plays we are unable to say, but at the same time we are inclined to think that it is a very important factor.

It seems to be very well established that we may think in terms of the praecox personality as follows:

1. The shut-in personality.
2. An individual who mixes poorly with his fellows.
3. A feeling of inferiority.
4. Such a make-up as to permit him to turn from reality and obtain satisfaction in thoughts of fantasy.
5. Poorly adapted to the natural sex demands.

Feeble-Mindedness: At this time it is not out of place to mention the causes of feeble-mindedness, and to stress that in this class of individuals a much higher percentage of simple psychoses develop. According to

Tredgold the feeble-minded are about fourteen times as liable to mental disease as those of a normal mentality. Studies in Massachusetts indicate that of the feeble-minded children studied 10 per cent have one parent feeble-minded and an additional six per cent both parents feeble-minded. In England the figures differ as follows: About 25 per cent one parent feeble-minded and eight-tenths of 1 per cent both parents feeble-minded. This leaves between 74 and 84 per cent of feeble-mindedness to be accounted for by causes other than heredity. These other causes should be thought of under three headings:

Pre-Natal

1. Parental alcoholism.
2. Tuberculosis in parents.
3. Syphilis in parents.
4. Epilepsy in parents.
5. Old age of parents.
6. Ill health of mother during pregnancy.
7. Trauma to mother during pregnancy.
8. Possibly consanguineous marriages.

Natal

1. Eclampsia.
2. Premature birth.
3. Birth injury.

Post-Natal

1. Accidents.
2. Infectious fevers.
3. Epilepsy.
4. Anterior poliomyelitis.
5. Meningitis.
6. Encephalitis, etc.

My main reason for presenting this paper is to stress the necessity of psychological and psychiatric studies among school children who show abnormal tendencies and reactions.

There is a strong probability that the abnormal reaction of the school child of today we will find to be closely associated with that individual's psychosis of tomorrow. And also there is a possibility that certain unusual tendencies and reactions may be found and corrected in the child of today that will prevent the individual's psychosis of tomorrow.

Discussion on Paper of Doctor Echols

Dr. Roger C. Swint, Milledgeville, Ga.: The etiology of mental disease is a problem that should interest every physician, particularly the general practitioners, because they are the ones who come in contact with these patients before they reach the hands of the specialists. The problem is one of the most complex that medical science has to deal with. Modern psychiatry stresses the idea of taking a given case and studying the individual as a whole, the total organism reacting to a total situation, and the cause of the dis-

order may be found in the gradual accumulated effects of unhealthy reactions to the demands of the environment. The causes, or factors, that produce these unhealthy reactions may be summarized as somatogenic, psychogenic, exogenic, neurogenic, and constitutional. I wish to emphasize particularly the importance of predisposition, as found in heredity. We find that the majority of mental patients have an inherited taint. We do not know how heredity works, but I am a firm believer in the fact that there is an inherited predisposition in most of these cases. We do not inherit mental disease, just as we do not inherit tuberculosis, but I am convinced that there is in most instances an inherited predisposition.

Given such a case, any abnormal stress makes these patients more likely to develop abnormal mental reactions at such times.

It is important in the study of these cases that, first, a thorough physical examination be made to find out whether there are any somatogenic problems, and we stress this in our work at the hospital, for we know that physical disease, whether chronic or acute, may be a factor in the production of the abnormal mental reaction. I do not agree with my esteemed friend, Doctor White, when he states that the mind is man's most distinctive organ, for the mind is not an organ. I have never seen anyone who could define the mind, and that is one thing that makes mental disease so complex.

I am convinced that there are two things we can do to limit or prevent mental disease, and that is the application of principles suggested by the essayist in the study of childhood, and the application of mental hygiene to early life and throughout life. There is also the question of applied eugenics. Something must be done to prevent bad heredity. I am fully convinced that the Mendelian Law is true in a certain sense, with certain limitations, and that we can anticipate certain formulas based on the principles of the Mendelian Law as applied to inheritance on mental disease, and that if we would pay as much attention to the mating and marriage of human beings as the stock breeder does to the mating of animals we would make a greater contribution to our children and grandchildren than all the discoveries that will be made in medicine during the next century.

Dr. Henry D. Allen, Jr., Milledgeville, Ga.: I wish first to congratulate Doctor Echols upon bringing a paper on the etiology of mental diseases in general before this Association, because I feel that the only scientific progress that can be made rests upon the adoption of some working hypothesis. It really does not make any difference whether the etiology is true in any sense so long as it gives us a driving force to push forward and try to find out more and more about mental disease as we go along. Like Doctor Swint, I feel that the mind is not a distinctive organ. I think it is more like a phonograph record, or an electrical transcription, than an organ in that there is irritability to all protoplasm, and that the nerves are of a more recent evolution than any other tissue in the body, and we must feel that the nerves have developed certain characteristics

that no other tissue has. The nerve tissue has ability to absorb and diffuse and to refer irritability in what we know as conduction. There is also left an impression that is capable of being reproduced, as we recognize as memory. So every stress and strain that a person has undergone reacts against the organism to bring about a tissue disintegration that one cannot overcome completely.

I think, touching upon alcohol or drugs, we might get this point fairly clear in our minds. We know that a person absorbing something like 365 gallons of alcohol over a period of four years will surely get into a mental state that is rather classical, as described by the Russian scientist, Korsakoff, and if that person goes into delirium tremens and recovers, we feel sure his trouble was due to alcohol. If he takes an additional quart over this amount the disorder might be extended over ten months or a year, or go into a chronic dementia praecox type of insanity. I do not think we are justified in saying that because this resembles a personality psychosis that alcohol and drugs are not capable of producing a permanent psychosis because they produce a temporary psychosis.

I also like to feel that every one of us has limitations to our capacity and ability to meet our standards of conduct, ideals, and so forth. People like to feel that these produce mental diseases, and I think much of our research will be along that line.

When it comes to heredity, we feel that we know a good deal more about animals than we do about human beings, but it is well to keep in mind that the male characteristics largely outnumber the female characteristics as developed in the single ovum.

Dr. James N. Brawner, Atlanta, Ga.: I wish to commend the paper presented by Doctor Echols on the etiology of the psychoses which has been so ably discussed by Doctors Swint and Allen. After listening to this paper I think you will agree with me that mental diseases are not so mysterious, as they are simply the manifestation of some disturbance in the body, brain, or nervous system which causes the brain to function abnormally. The majority of patients who are sick mentally are also sick physically. In my experience I have found that the majority of mental breakdowns can be classified under the following heads:

1. Defective heredity, or what is frequently called a defective constitutional make-up. In my experience this constitutes at least 50 per cent of the cases.
2. The infections and their sequelæ. There may be direct infections of the brain, such as we find in lues or in encephalitis, or the infection may be in some other part of the body with the formation of toxins which have a selective affinity for the brain cells.
3. Alcohol and drug psychoses.
4. Dietary deficiencies.

I am sorry that Doctor Echols did not mention these cases more in detail in his paper, for I think these deficiencies are very important, especially in the psychoses which occur around the age of puberty. A deficient diet in a child over a long period may be the forerunner of a psychosis later in life, as they cannot stand the strain of life as well as those individuals who

have received a well-balanced diet.

5. The degenerative diseases, such as heart diseases, arteriosclerosis and nephritis.

6. The psychogenic psychosis. This, in my experience, has been the main causative factor in about 10 per cent of the mental breakdowns.

Doctor Echols is to be congratulated on the splendid paper presented today.

Dr. C. C. Harrold, Macon, Ga.: One question I wish to ask is a question I think medical men are constantly being asked, and that is whether or not it is safe for an epileptic individual to have children.

Dr. Arthur Little, Thomasville, Ga.: Perhaps I did not hear clearly, but so far as I am aware Doctor Echols and the others did not mention education, our school system and colleges. We have a question up now at Thomasville as to whether we should have eleven years of school or twelve. The thing that is causing us to consider an extra year is the increased burden just at the age of puberty, about the seventh grade. I would like to hear discussion from these eminent men who know something about these things, and also on the effect of college work, especially among girls. I have about come to the conclusion that I would prefer that my daughter be not too highly educated; I would prefer that she attend college where the curriculum is not too high. I may be wrong, but this is my feeling.

Dr. George L. Echols, Milledgeville, Ga. (closing): In regard to Doctor Little's question I have just this to say: I have had a good deal of experience with psychiatric studies among school children and at present I am doing a little work at the University of Georgia. It works as follows: The higher we raise the standards in an educational way the more the weaklings and inefficient will drop out and be observed, and that will increase the detection of mental defectives.

As to Doctor Harrold's question, I cannot answer it definitely, but I would advise along this line: If the patient is having many convulsions he is unable to care for himself let alone caring for anyone else. We all know that epilepsy gives a poor heredity and I would advise against marriage if the epilepsy is in any way pronounced.

In regard to organs, for instance, the liver is a part of man and it gets out of order and develops disease; the same is true of the gastrointestinal system; it functions all right sometimes and sometimes it does not. The mind is a part of man and sometimes it functions well and sometimes it does not. The mind cannot be put in a test tube and boiled. It cannot be put on the scales and weighed, but it is a part of man, just like the liver and the gastrointestinal tract, the eye, ear, and so on, and the mind can develop disease. Doctor Brawner hit the nail on the head when he said mental disease is not mysterious. There are definite things that can be done in treating mental diseases that are just as reasonable as the things we do in treating bodily disease. I thank you.

ACUTE APPENDICITIS IN ELDERLY PATIENTS*

WM. S. GOLDSMITH, M. D.

Atlanta

Acute inflammatory lesions, terminating in suppuration, in the intestinal tract after the fifth decade, are singularly rare. It would seem that the individual, beginning with the sixth decade, has established through atrophic degeneration with partial obliteration, a resistance leading to almost certain immunity.

On the other hand, the child under five years of age, also possesses an interesting immunity from such infections. The child in the first half of the first decade, on account of rapid anatomical development and dietary influences, creates a resistance of striking importance, but with a significant frequency of attack not seen in old persons.

With the advantages of much clinical data, confusion begins with the knowledge that the appendix in a young child is as long as the appendix in an adult, and that the logical explanation of the infrequency of appendicitis in people over sixty years of age is that the majority of them have practically no appendix.

Maes describes "senile appendicitis" as "of vascular origin and not merely a local infection of the mucous membrane, becoming a treacherous disease, getting under way before the objective signs are prominent."

The appendix, being a vestigial part of the caecum, is still a source of grave potential possibilities, notwithstanding marked obliterative changes due to previous mild attacks. Quoting the brilliant Da Costa: "The appendix is a functionless part and, like a loafer in a city, is a dangerous element. Each is a menace. The loafer is apt to become a criminal; the appendix apt to inflame and kill."

The equation of age, then, is paradoxical in that the extremes of life, early childhood and old age, are periods of the greatest infrequency of appendicular infection.

The purpose of this contribution is to invite discussion, which will stimulate a careful

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study in all cases of acute abdominal distress in elderly people, in whom are found symptoms of partial intestinal obstruction, fever, renal insufficiency and other signs of acute or chronic sepsis.

The experience of the writer, as will be presently noted, is that of helplessness and mortification in view of a mortality of 42 per cent.

The presentation of fourteen cases in patients from sixty to eighty years of age, the detailed narrative of which is unnecessary at this time, is given as statistical information.

A mortality of 42 per cent plus, in acute "senile appendicitis" is entirely too large, and while I am, rather unwillingly, forced to assume a large share of responsibility, my consultants, all able men, labored also in the uncertainties of confusing symptoms, until increasing exhaustion and impending collapse were imminent before operative measures were put into effect.

The older men present today will sympathize with the writer when it is understood that five of these cases occurred in the early years of practice, in the homes of the poor, where all modern surgical equipment and laboratory aids were unavailable. General anaesthesia, with chloroform and sulphuric ether, antisepsis with bichloride of mercury and carbolic acid solutions, were our bulwarks of safety in those dramatic days of the gay nineties.

It may be mentioned here as an interesting coincidence that in three cases occurring within the past year, two being in physicians, prompt diagnosis and operation revealed a beginning gangrene, not sufficiently advanced to prevent excision with recovery. In only one other case, also in a physician, twelve years ago, was a similar stage of the disease encountered. As a rule, physicians are not keen about personal operations, but in these cases operative relief was eagerly sought. It may be said, however, that in each instance a recent death from appendicitis had occurred in their respective practices.

There were fourteen patients. Four cases were gangrenous without free puss. Ten cases had developed abscesses of varying size and virulency. In four of the white patients, two males and two females, with large ab-

cesses, the history of the attack was indefinite. These four cases illustrated the treachery of the infection, as the date of indisposition, character of suppuration and degree of exhaustion, pointed to periods of several days of increasingly desperate illness. Two of these patients died, one of each sex.

One white male and one colored male had fecal fistulae, and both died. The fistulae were large and the sloughing terrific. The colored patient had multiple fistulae and an attempt to resect the bowel precipitated death in twenty-four hours. One white female, age 71, died four days after a large abscess was drained, from heart exhaustion. One white female, 78 years old, sent to the hospital for obstruction due to suspected malignancy, was drained of a large, thick walled abscess, and for seven days pursued an encouraging convalescence, when sudden uremia developed following a cessation of deci-saline infusion twenty-four hours previously. It is speculative, of course, as to the influence of a sudden withdrawal of a super quantity of fluids, but we were misled, probably, by the ingestion of satisfactory quantities of water by mouth and a corresponding normal output.

This case points out a large question, relative to the advisability of administering quantities of fluids artificially after a reasonably satisfactory convalescence has begun. It is my observation that the one outstanding condition to be treated is dehydration. Concentration of all body fluids was apparent in each of the abscess cases, and improvement was noted in practically all of them immediately as hypodermoclysis was begun. These old people have developed a compensatory habit of fluid intake and output, but when sepsis begins body fluids decline and the burden upon the heart, liver and kidneys is enormously increased. Immediate, persistent, but gradual subcutaneous infusions of one's choice of fluids is imperative. If proper hospitalization is available the slow administration of solutions intravenously is desirable.

It is interesting that not a patient developed pneumonia. In every case it was expected and it was probably prevented by reason of quantities of fluids, free elimination, changes in posture and conservation of the heart.

To Summarize

White males—7.

White females—3.

Colored males—4.

The ages were: white males—60, 62, 62, 64,

68, 73, 75; white females—67, 71, 78;

colored males, 65, 65, 70, 80.

Indulgence here must be asked with reference to the ages of the negro patients. Contrary to the vanity of their white friends, an old negro takes delight in claiming an advanced age, and the writer must, therefore, fix arbitrarily an approximate birthday. The negro, age 80, looked his age. He recovered promptly, and this was the first case drained with local anaesthesia. Two additional cases were operated upon with local anaesthesia. Eleven patients were given chloroform, straight ether, gas ether and gas-oxygen, depending upon the era in which the operation occurred.

From the foregoing statements the following conclusions are submitted:

1. That the age element is a large factor in the diagnosis and treatment of acute disease of the vermiform appendix in elderly persons; and that consequently, many cases remain undiagnosed until complications develop, increasing the operative risk.

2. That when such cases finally come to operation, unremitting care must be maintained to conserve the damaged resources of the patient.

3. That while the mortality here reported is excessive, it is misleading in that, as stated, over one-third were operated upon before the period when invaluable laboratory examinations were available.

Discussion on Paper of Doctor Goldsmith

Dr. C. C. Harrold, Macon, Ga.: I have to confess that I have had comparatively few cases and little experience in this work. I did not realize that it was so limited until I received a copy of Doctor Goldsmith's paper and began to think about it. I can remember only two patients of my own whom I would consider old. The reason I thought of them was because of drainage. Both of them were pus cases, one comparatively recently, the other years ago. I think if we will refresh our minds we will remember this about many cases—apparently the patients do not have much pain at the beginning of the attack. In Doctor Goldsmith's series ten of the fourteen were drainage cases. My two patients got well. I think that was just luck. They were both drained and both had local anesthesia.

Regarding the question of using saline under the

skin, I think it works very well when patients are quite ill. When they begin to convalesce, or you think they do, it is my experience that they object bitterly to the constant or frequent introduction of saline under the skin. I feel that after twenty-four hours the vast majority of patients can take fluids into the rectum just as well, and I use this method constantly.

I enjoyed the paper very much and think it opened a real line of thought. I hope we shall all watch our cases in the future and get some data relative to this disease in the aged.

Dr. Grady N. Coker, Canton, Ga.: I think Doctor Goldsmith's paper on acute appendicitis in elderly patients, although a frequently discussed subject, is always timely for discussion. Acute inflammatory lesions in the intestinal tract during any decade are a source of worry to the general surgeon and tax his skill to the limit in regard to combating these conditions.

About 50 per cent of the people over 60 years of age have practically no appendix. This is due to the degeneration of the appendix and lymphoid tissue surrounding it and that probably explains the infrequency of appendicitis in people over 60 years of age.

The mortality rate in children under 10 years of age is higher than the mortality rate in young adults, although the mortality rate above 60 years of age is higher than the mortality rate of young adults.

Prognosis of children under 10 years of age and in adults over 60 years of age is more unfavorable than in those between these two ages. It is very fortunate that in early childhood and old age we have more infrequent attacks of appendicular infection. In elderly people acute abdominal distress is more liable to be some partial intestinal obstruction, acute gall-bladder condition, renal insufficiency, some form of malignancy, or chronic sepsis.

As to the appendix being a functional part or organ, may I here quote the famous pathologist who wrote the poem about the poppies that bloomed in Flanders Fields. He says, "Complete absence is as rare as is complete absence of the stomach, and that organ also exhibits marked variation in size. No one, however, suggests that the stomach is a useless and disappearing organ. Rather, we cannot but be impressed by the hydrostatic relationships of the large gut in man, an erect animal.

"The fluid contents of the ileum pour into the cecum and there and in the ascending colon undergo inspissation prior to discharge per anum. In other words, the cecum and ascending colon have physiologically to undergo great variation in the volume of their contents. It would be to the detriment of their function were they to be acutely susceptible to pressure changes were they to undergo peristalsis and void their contents immediately they became filled from the ileum. We must regard them thus as, in the normal state, distinctly unresponsive to pressure effects. It is the appendix, we hold, that is the hydrostatic agent initiating peristalsis in the large gut. In it we have a narrow tube, with no such pronounced variations in caliber, so situated that the weight of the column of forming feces is communicated to it, and we presume that when

this weight reaches a certain point, the distending force acting upon its walls originates muscular contractions which spread directly into the cecum and so initiate the forward movement of their contents. Such a view explains the tendency to constipation in the bedridden, in whom this gravitational influence of the contents of the ascending colon can have little effect; it explains the normal tendency to empty the bowels, either shortly after rising and assuming the erect position or after the first meal when stimulating peristalsis of the small bowel has driven extra contents into the cecum and so increased the load; it explains the constipation that follows some interval removals of the appendix."

Edmond V. Cowdry, in his special edition of "Cytology", states that the exact functional significance of the basal granular cells of the intestines and appendix remains to be discovered, there being no convincing evidence that they belong to the endocrine group of organs, and specific correlation is lacking between the discharge of granules and the digestion of any foodstuff. To the histo-physiologist they present a problem that their pathology is more fully known than is their physiology, since they have been shown to be the origin of certain tumors of the appendix and intestines. It is my opinion that some time the function of the appendix will be established. We now know a great deal in regard to the pathology of the appendix and abdominal suppurations, yet there is a lot to be learned.

Our mortality rate in appendicitis is not only too high in the elderly patients, but it is too high in patients of any age.

The problem of preoperative and postoperative care in elderly patients is an acute one and one we should think of very seriously. Elderly patients are more liable to develop uremia and postoperative pneumonia; gangrene and perforation seem to occur more quickly in the elderly patient than in the young, and they do not stand sepsis so well.

During the past seven years in over 2,000 operations we have had about 400, or 20 per cent, of these cases that were for appendicitis. Five of these cases were over 60 years of age; three male and two female. One patient had an operation for drainage of appendix abscess with local anesthesia. The rest of them were operated upon under straight ether anesthesia. We lost one patient, which gives the mortality rate of 20 per cent.

I do not think that in the postoperative care of elderly appendicitis patients, or any acute abdominal condition, fluids should be forced. Due consideration of the patient's circulation and kidneys should be given. These overburden the heart and kidney that are already beginning to decline from a septic infection. I think that fluids should be given very gradually, either by Murphy drip with glucose or soda or subcutaneously.

Dr. Stewart R. Roberts, Atlanta, Ga.: This is a very timely paper. It is a far cry from the time when Drake first reported a case of appendicitis in the American literature, in 1837, and here we are ninety-four years later still discussing the subject.

The death rate in Atlanta and Richmond is higher

than it was thirty years ago. I do not know the figures for other cities in the United States, but they are relatively probably the same. There are several things that accentuate the timeliness of this paper. First, in the senile the disposition to delay still is apparent, and if there is any delay it means usually a complication. If any inflammation of the appendix is present it makes a bad matter worse. Second, in the aged there is a chronic hesitation in sending for a physician, or in convincing them that they are really indisposed. In a grandparent who complains, it simply means that she is complaining again, and they do not see the need of calling a physician, but suggest the need of a cathartic. Doctor Goldsmith's statement that these patients are largely dehydrated is true, and this is to be noted.

In the next place, the books on surgery and clinical medicine, while describing well acute appendicitis, seem to me to omit one of the most common symptoms in these cases, and that is an overwhelming weakness that comes over the patients. I have seen the senile patients go almost into collapse, and it was impossible to get a coherent history of the attack. In one case the patient lay for three days before a diagnosis could be made. The leukocytosis, as the essayist said, in the aged is not so high as in the young.

Horsley's advocacy of the use of glucose in the treatment of the dehydration in these patients, or in any other dehydrated condition, in the aged is valuable. It is a condition that requires our best and most meticulous diagnostic effort, and then sometimes we cannot be sure. It is a very timely paper, and one we should all heed.

Dr. Floyd W. McRae, Atlanta, Ga.: The opinion of one who has passed through the experience Doctor Goldsmith has had is of value. I am glad I came along a little later, for my mortality is not quite so high. As Doctor Coker mentioned, in about 40 per cent of the older patients the appendix is not obliterated. Many, no doubt, have had mild abdominal pains throughout life and usually the application of some home remedy has been sufficient to mitigate their discomfort. This has prevented a physician from seeing them early when appendicitis developed. The diagnosis is not easily made in most instances and the patient is allowed to go along a few more hours, and then the surgeon sees the patient and he allows her to go along because he cannot make a definite diagnosis on the first examination. The temperature often is normal, there is no rigidity and the leukocyte count is low.

I think one of the prime factors in these cases is the pain in the abdomen, which cannot be definitely interpreted. Such cases should put the appendix under suspicion, and it should be kept there until something else is definitely proved. If the diagnosis of appendicitis is verified, the only procedure is operation. Quickly in and quickly out are definite operative factors in decreasing mortality. Other conditions that may be present should be cared for, and the abdomen should be closed as rapidly as possible.

My patients number about the same as Doctor Goldsmith's, and the oldest was 89. None of these cases was without complications, intestinal obstruction and general peritonitis being the most common.

I think the postoperative care is very important, in association with an internist. Most of these patients are not only dehydrated but have cardiac and renal insufficiency. If this is not taken care of very little can be accomplished.

At present I am working on the mortality statistics in Atlanta. In all the cities reported throughout the country, the mortality is much too high and shows an increase in the past few years. I think, if a study is made with the co-operation of physicians, something may be worked out which will help us decrease the mortality.

Dr. Robert L. Rhodes, Augusta, Ga.: I wish to agree with all that has been said, and to state that in my experience these cases have not been so uncommon. I have had six cases in the past few months, the oldest patient being just six years younger than Doctor Goldsmith's, 83. That patient was a woman with an acute gangrenous appendix, which we removed under spinal anesthesia. Two patients operated on last week were women. One aged 64, had an ordinary stomachache one evening, was operated upon about 5:00 o'clock the next morning, and was drained. The overwhelming majority of them have been drainage cases, as Doctor Goldsmith pointed out. The symptoms in all have been exceedingly mild, much more generalized, and with much less tendency to localization, but I think a careful examination usually shows one point of tenderness and that is a big help. The leukocyte count, in my experience, is not of much assistance. It may vary from 5,000 to 6,000. The old lady, aged 83, had 19,000.

One thing that always delays diagnosis in these cases is that in persons of that age we commonly look for something more serious, cancer or something of that kind, and are rather inclined to procrastinate. With the development of shock, sooner or later the doctor sees them, and if he is not careful in his examination he is more likely to think of a carcinoma of the head of the cecum and be inclined to wait rather than seek surgical consultation.

Dr. George W. Fuller, Atlanta Ga.: It is always timely to discuss appendicitis, and while listening to the paper I recalled two cases that might be put in the category of senile cases. Both of them occurred in the last twelve months and in one I attribute the saving of life to prompt diagnosis and prompt action. The patient was a man who complained of pain over his entire abdomen. He thought he had eaten something the night before that disagreed with him and it was difficult to make a diagnosis. I saw him early in the morning and visited him often during the day, finally concluding that the diagnosis was appendicitis and suggesting that he go to the hospital. I had difficulty in persuading him to do this but finally succeeded, and we opened the abdomen. He was

64 years old, very obese, and the appendix was so necrotic that we had to take it out in pieces. He had a rapid type of infection with such a foul odor that we could hardly stand being in his room, but with drainage and proper care he recovered.

The other patient was a woman, aged 67, with an appendix that was already abscessed when I saw her. It evidently was rather a slow infection, and we simply drained the abscess and both recovered. I believe if there is any place where spinal anesthesia is indicated it is in this type of case.

I have enjoyed Doctor Goldsmith's paper and think it is one of the best I have heard him read in some time, and it gives us splendid food for thought.

Dr. William S. Goldsmith, Atlanta, Ga. (closing): I am most appreciative of the cordial reception my paper received, and value very much indeed the report of the cases by the various men.

I will only say, in closing, that old people can stand a lot of punishment in operations if they are not prolonged too greatly. These patients can be drained quickly under spinal, local, or gas-oxygen anesthesia, but do not do too much. They will get through all right if you do not prolong the operation. The main thing is the postoperative care. As I stated in the paper, the great thing is to feed them with fluids, and the question as to how this shall be done and what fluids shall be used was left open. We all have differences of opinion about this that amount to nothing in the long run. In suspected malignancies with a low blood count the diagnosis is difficult; the old lady of 78 had a blood count of 7,000 or 8,000 and I was prepared to make a resection or an anastomosis, for I suspected a malignancy, but I found I had an abscess to deal with. That patient died.

POSTVACCINAL MYELITIS

THOMAS WILLIAM BROCKBANK, Washington, D. C. (*Journal A. M. A.* July 25, 1931), calls attention to the fact that the acute inflammatory lesions of the nervous system reported as occasionally following vaccination against smallpox usually have presented the clinical symptoms of encephalitis or poliomyelitis. In cases with paramount spinal cord involvement, even when the lesions accompany smallpox itself, the sensory impairment has been negligible or transient. As a contrast to this generally accepted picture, he reports a case of postvaccinal myelitis with complete spinal anesthesia persisting up to the level of the ninth dorsal segment and paralysis. The clinical and laboratory signs of spinal meningomyelitis are presented. The sensory level seemed to indicate that the inflammation in the acute stage had progressed only to the level of the fifth dorsal segment, although motor signs pointed to mild inflammatory involvement in segments considerably higher. The sensory level two months after onset was in the eighth dorsal segment. The prodromal symptoms began on the thirteenth day after vaccination.

NEUROLOGICAL SYMPTOMS OF PERNICIOUS ANEMIA*

WM. A. SMITH, M. D.

Atlanta

Since the development of modern therapy, the early diagnosis of pernicious anemia has become highly important. Neurologic symptoms occur in 80-90 per cent of all patients with pernicious anemia (Woltman,¹ Hurst,² Reese and Beigler,³ Curschmann⁴). It has been known for years that the neurological aspects of this disease may long antedate typical blood changes, and it is unfortunate that the name of this disease emphasizes only the anemia. Bramwell⁵ stated that nervous symptoms may precede positive signs of anemia for as long as three years. Woltman found that in 150 cases, the anemia was preceded by nervous symptoms in 1.4 per cent, the longest interval being thirteen months. On the other hand, Ungley and Suzman⁶ in sixty-one cases found nervous symptoms to occur first in thirty-nine cases, or 63.9 per cent. Often any blood changes present consist mainly of marked variation in the size of the red cells, the average being larger than normal. Consequently, the neurologic features may be of great assistance in making an early diagnosis, and the prompt institution of treatment may even prevent the development of marked anemia.

It is important to bear in mind that both the neurologic and blood changes are preceded by achlorhydria. Thus in twenty-four cases of combined degeneration of the spinal cord without anemia, Hurst⁷ found achlorhydria in all. Vanderhoof⁸, in a study of achlorhydria, reported seven cases with combined degeneration of the cord without anemia. The achlorhydria may exist for years before the development of anemia or nervous symptoms. It is generally accepted that this is often familial and due to a functional disorder of the gastric mucosa without anatomical defect. Conner⁹ reported a case with achlorhydria for twelve years, and another for eighteen years, before the development of pernicious anemia. He found that among the

blood relatives of patients with pernicious anemia an achlorhydria existed in 25.9 per cent of those examined, while in a control series the incidence was only 15.2 per cent. The achlorhydria is thus not a symptom of the disease, but a definite predisposing factor. It persists throughout the course of the disease and is unchanged by treatment. Its importance has been shown by Castle,¹⁰ who demonstrated that in the normal stomach during the digestion of beef muscle some substance is elaborated which is capable of relieving the anemia in this disease. Thus the conception of this disease as a deficiency disease, due in some manner to long persistent achlorhydria, has been developed. There is an inadequate gastric digestion of protein, permitting the development of a deficiency in spite of a diet adequate for the normal individual. Due to the achlorhydria, gastric symptoms, as diarrhea, flatulence, indigestion and glossitis often occur before either anemia or nervous symptoms.

The deficiency as regards the blood seems to be some substance necessary for the formation of the stroma of the red blood cells (Whipple,¹¹ West,¹² Cornell,¹³). The etiology of the nervous lesions is unknown. If due to a deficiency it may not be identical with that for the blood, since the nervous symptoms and blood changes often show no correlation.

Similar cord lesions have been produced in dogs by a diet deficient in the anti-neuritic portion of vitamin B (Gildea, Kattwinkel and Castle¹⁴). This has suggested that a deficiency of vitamin B may be an important factor. On the other hand, Mellanby¹⁵ has produced identical lesions by diets deficient in the fat-soluble vitamin A. The liver is known to be a storage center for vitamin A (Coward, Lush and Palmer,¹⁶ Steenbock, Sell and Nelson¹⁷). This suggests that whole liver might be more effective in the treatment of these disorders than the water-soluble extract of liver. The report of Koessler and Maurer¹⁸ showing improvement in the neurologic symptoms by a high vitamin diet is suggestive. They emphasized that fats should be included in the diet, and that the extract should not replace whole liver. Conner¹⁰ also reported a case with marked im-

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provement on a high vitamin regime, with only a small amount of liver in the diet. The etiology of the nervous system lesions, however, remains to be solved.

Pathology

It is known today that all parts of the nervous system may be affected in this disease. Degeneration of the peripheral nerves may occur, usually the spinal nerves being affected, but a few cases of optic atrophy have been noted. Hamilton and Nixon,²⁰ in 1921, studied the peripheral nerves in seven cases, and found degenerations in six. Van Bogaert²¹ has also reported a case with degeneration of the peripheral nerves. According to McAlpine,²² pernicious anemia is a common cause of peripheral neuritis after the age of 35 years. Woltman¹ states that a peripheral neuritis occurred in 4.9 per cent of those with nervous symptoms. The involvement of the peripheral nerves explains the lack of changes in the spinal cord in certain patients with neurological symptoms.

The spinal cord lesion consists of degeneration in the white matter, most marked in the posterior and lateral columns, but later involving also the anterior columns. The process begins in the thoracic segments of the cord, and usually in the median portion of the posterior column. There is degeneration of the myelin sheaths and destruction of the axones. The process begins in small isolated foci, which gradually become confluent. There is an absence of glial proliferation, resulting in the formation of small vacuoles of irregular shape, so that the result is called a status spongiosus. As a result of this lesion in the thoracic portion of the cord there is degeneration of the ascending paths above, and of the descending paths below this lesion. There is no inflammatory reaction. (See Weil and Davison²³). The frequency of cord pathology as a basis for the neurologic symptoms is questionable. Woltman reported that of those patients with nervous symptoms 99.2 per cent had cord degeneration. However, the clinical differentiation of the cord changes and peripheral nerve lesions is often difficult. Grinker,²⁴ in a study of seventy-four cases with neurologic changes, reported that only 30 per cent had cord lesions.

The changes in the brain are similar to those in the cord. Degenerative plaques may be found in the commissural and association tracts with secondary changes in the nerve cells. Nine cases were studied by Barrett²⁵ in 1913. There may also be small hemorrhages or focal softenings. Woltman,²⁶ in 1928, studied seven cases. The degenerations were found to be just as frequent as in the cord, but were usually smaller, fewer, and more widely scattered.

Clinical Manifestations

The earliest symptoms are almost invariably sensations of numbness and tingling in the hands and feet. These are symmetrical almost from the start and interfere with the normal use of the hands. They precede motor symptoms often for months, and as reported by McAlpine,²² as long as seven-eight years. There may also occur shooting pains, sensations of tightness, drawing or cramping. Sturgis²⁷ has shown that these symptoms are not due to local anemia. By themselves they do not indicate cord degeneration, but may be due to a peripheral neuritis.

Later, motor symptoms develop, which consist usually of weakness, with ataxia, due to a loss of the sense of position in the extremities. If there are cord lesions, spasticity may develop, and also loss of sphincter control.

The earliest and most common objective finding is a disturbance in vibratory sense in the extremities. In any suspected case, this examination is most valuable. Thus Friedman²⁸ was able to predict the development of pernicious anemia in four cases with a loss of vibratory sense as the only objective neurologic finding. Later, there develops a loss of the sense of position in the extremities. Superficial sensory changes may occur which are usually patchy over the trunk, and of a glove or stocking type over the extremities. Woltman¹ found a disturbance of deep sensibility in 92 per cent of superficial sensibility in 42.4 per cent of those with neurologic changes.

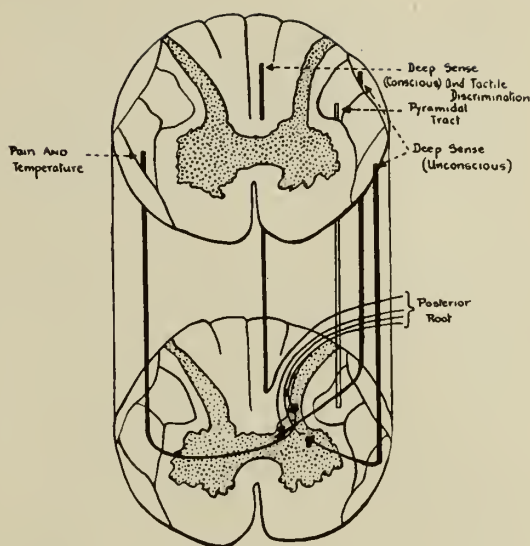
The reflexes may be lost, or if there is involvement of the pyramidal tract, they may be exaggerated. Various combinations may occur, as loss of the tendon reflexes with abnormal plantar reflexes (Babinski, etc.), or

exaggeration of the tendon reflexes with or without abnormal plantar reflexes. Woltman found a loss of reflexes in 24.8 per cent. Abnormal plantar reflexes were found in 26.4 per cent by Woltman, and in forty-one of sixty-one cases by Ungley and Suzman⁶.

Sphincter disturbances usually are late in appearing. Woltman reported partial incontinence in eight per cent, while Ungley and Suzman reported disturbed micturition in twenty-six of sixty-one cases. Optic atrophy was found in three of sixty-one cases by Ungley and Suzman.

The presence of paresthesias, even with loss of reflexes and ataxia, is not proof of spinal cord degeneration (although it may be present), but may be due to a peripheral neuritis. The differentiation of these two lesions is important from a prognostic standpoint, since improvement may occur with peripheral neuritis, while it is hardly to be expected for any restitution to occur in the cord. It has been stated that the cord lesion usually begins in the medial portion of the posterior columns, in the pathway for deep sensations. Consequently, the only objective finding may be a loss of vibratory sense with or without joint sense disturbance. Since the fibers carrying sensations of touch, pain and temperature sensations enter more laterally in the cord (see figure), they may not be involved. Dejerine²⁹ called this integrity of superficial sense with involvement of deep sense the syndrome of the long radicular fibers of the posterior column. Similar findings may occur with a multiple neuritis. The differentiation between cord and peripheral nerve degeneration in a patient with paresthesias, loss of vibratory sense and ataxia may thus be impossible. The early loss of reflexes in the lower extremities, (below the cord lesion) also shooting pains, tenderness along the nerve trunks, and early loss of superficial sensations may indicate a peripheral neuritis. Localized palsies, as in the case of foot drop reported by Stone³⁰ also would indicate a neuritis. The presence of sphincter changes or pathologic reflexes, as the Babinski would indicate cord pathology.

As the disease progresses, lost reflexes may return and become exaggerated, or spasticity may change to flaccidity with loss of re-



PATHS INVOLVED IN COMBINED DEGENERATION

flexes. Care must be taken in interpreting these changes as evidence of improvement. Some cases run a rather rapid course.

Mental changes may occur during the course of pernicious anemia or among the earliest symptoms. Any type of mental state may occur. In the beginning, the exhaustion and irritability produce a neurasthenic state often before there is severe anemia. Langdon³¹ called this pre-pernicious anemia. More pronounced psychoses have been reported, with high frequency of delusions of persecution. Thus Camp³² reported a case with paranoid delusions simulating general paresis. Other cases have been reported by Smith³³ and Hulett³⁴. In a case of Richardson's³⁰ a patient with delusions of persecution and without severe anemia recovered after two weeks of liver therapy. Melancholia is also common. Confusional states are common terminal states. The various mental states have recently been reviewed by Emile-Weil and Cahen³⁰. In discussing these conditions, Woltman²⁰ stated that the psychosis may occur before the diagnosis of pernicious anemia is justified and that there is no correlation between the clinical symptoms and the changes in the brain; of his seven cases with marked brain lesions, there were no mental symptoms in six.

In association with severe anemia, various cerebral symptoms may appear as headache,

tinnitus, choreiform movements, tremors, sudden blindness, numbness or hemiplegia.

Diagnosis

In the typical case, there is a history of exhaustion and gastro-intestinal disorders, associated with paresthesias in the hands and feet; this may be followed by the development of ataxia and other nervous disorders. The neurological examination almost invariably shows a loss of vibratory sense, with or without other changes. The presence of glossitis is suggestive, and the finding of achlorhydria practically confirms the diagnosis, as achlorhydria is rare in other nervous diseases. From a neurological standpoint, the diagnosis can thus be made with little or no reference to the state of the blood; in fact, the diagnosis often should be made before the blood shows an advanced anemia. Certain other conditions with similar neurologic changes must be differentiated; these include such conditions as carcinoma, Addison's disease, diabetes and pellagra. However, this differentiation is usually made by characteristic signs of such disorders, and the association of neurologic changes in those conditions is less common than in pernicious anemia. Neurosyphilis may be differentiated by the characteristic pupillary changes and the serological findings. Multiple sclerosis usually gives evidence of more wide-spread involvement of the nervous system, and there is no achlorhydria in this disease. Spinal cord tumors may be differentiated by evidence of spinal block. Acroparesthesia, a vasomotor neurosis, may be differentiated by the presence of vibratory sense and the absence of achlorhydria. The diagnosis in the usual case is not difficult if the typical features are kept in mind.

Prognosis and Treatment

There are at present many conflicting reports in the literature concerning the results of treatment in these disorders. Whether improvement occurs in case of cord degeneration is questionable, but it is entirely possible that the neuritic symptoms might disappear. Curschmann⁴ stated that he had never seen improvement with liver therapy, and that one case had developed neurological symptoms after the blood had been rendered normal. Cohen³⁷ and Isaacs³⁸ have also re-

ported similar cases with nervous symptoms appearing or progressing during liver treatment.

More favorable reports are those of Baker,³⁹ Smith,³³ Bubert,⁴⁰ Mason⁴¹ and Lottig⁴². Ungley and Suzman reported improvement on seventeen of thirty cases observed for sixteen months; they stated that failure to improve indicated insufficient liver, cessation of liver or sepsis, and that the prognosis depends upon how soon the treatment is started and the duration of treatment. They further stated that treatment of the nervous disorders required more liver than for the anemia, and that whole liver appeared more effective than liver extract. Paresthesias and ataxia improved in all their cases, and sensory changes and sphincter disorders improved in many. Richardson³⁵ stated that benefit may not occur from treatment for two years, but that paresthesias invariably disappear; the nervous symptoms call for large amounts of liver regardless of the blood count.

According to Conner⁴³ treatment with swine stomach gives about the same results as with liver, but Wilkinson⁴⁴ felt that it was more effective. He reported paresthesias without reflex disturbance as being cured in almost every case.

In addition to the treatment with liver, preferably whole liver, or stomach, the patient should be given hydrochloric acid indefinitely. In fact, any patient with persistent unexplained achlorhydria should take the acid indefinitely, in the hope of preventing this disease. There is evidence to suggest also that a diet rich in vitamins, particularly A and B, is highly important. Foci of infection should be removed. Active and passive exercises, heat and massage may be of symptomatic value. The studies of Macht⁴⁵ suggest that sunlight or ultra-violet light may also be of definite value.

CASE REPORTS

The following case reports are briefly presented to illustrate some of the above mentioned features.

Case 1.—A white male, aged 60 years, presented a history of achlorhydria which had been known for three years, and he had taken the acid for one year. His physician stated that his blood was normal. For six weeks, he had noticed numbness in the hands and feet, with a sensation as if they were swollen or weighted with a brick; these sensations were most

marked in the morning, disappearing on use of the hands. The examination showed only a marked tremor of the hands with impaired sensation so that he was unable to recognize objects in the hands with the eyes closed. A few months later, the patient had symptoms and signs of advanced degeneration of the spinal cord and pernicious anemia.

Case 2.—A white male, aged 52 years, complained of numbness of the hands and feet for eight months, followed by staggering in walking. On movement of the head he would notice an electric-like sensation pass down his spine and into all four extremities; he felt like he was walking on cotton. The examination showed a loss of vibratory sense in the lower extremities and up to the costal margin, ataxic gait, loss of joint sense in the toes, and impaired superficial sensations (in the hands up to the mid-forearm, and in the legs up to the mid-thigh region). The knee jerks were highly exaggerated. The other neurological findings were normal. Gastric analysis showed an achlorhydria; the blood showed slight anemia, but not typical findings of pernicious anemia. The other examinations gave normal findings.

Case 3.—A white female, aged 50 years, complained of weakness in the legs with numbness at night, as if the "blood was drained out"; there was difficulty in starting to walk because of a tendency to stagger. The neurological examination showed only loss of the knee jerks. An opportunity for further examination did not occur for sixteen months. At that time there was marked ataxia in all four extremities, loss of the tendon reflexes in the lower extremities, bilateral Babinski reflexes, loss of vibratory sense up to the ribs and loss of joint sense in the toes. There was an achlorhydria and typical blood changes of pernicious anemia.

Case 4.—A white female, aged 50 years, gave a history of chronic gastro-intestinal distress, with soreness of the tongue; for three weeks there had been a progressive weakness in the legs, with staggering gait, and for four days there had been retention of urine. Examination showed loss of the knee and Achilles jerks, loss of joint sense in the toes, loss of vibratory sense in the right leg, with impairment of superficial sensations in the right leg, right arm and left side of the abdomen; there was an achlorhydria and signs of pernicious anemia. Death occurred several days later.

Case 5.—A white female, aged 53 years, gave a history of anemia, sore tongue and achlorhydria for one year. Since the onset, there had been sensations of tingling and crawling in all extremities. The anemia had not been discovered for six months after the onset of nervous symptoms. She felt as if walking on pins and suffered from a sense of tightness about the rectum. Examination showed a loss of vibratory sense in the lower extremities, loss of joint sense in the toes, and ataxia. There was an achlorhydria and signs of pernicious anemia.

Case 6.—A white female, aged 40 years, had complained of numbness and tingling in the hands and feet for three weeks, associated with drawing pains in

the feet and legs and staggering gait. Examination showed a typical glossitis, exaggeration of the knee and Achilles reflexes, loss of vibratory sense in the lower extremities, and marked ataxia. There was an achlorhydria; the blood showed no anemia, but marked poikilocytosis with many macrocytes. Other examinations gave normal findings.

Case 7.—A white female, aged 51 years, gave a history of achlorhydria of several years, with sore tongue; for one year there had been tingling and drawing pains in the hands and feet, with ataxia. Examination showed in addition to ataxia exaggeration of the knee jerks, loss of joint sense in the toes, and loss of vibratory sense in the lower extremities. The blood showed no anemia. Other examinations gave normal findings.

Case 8.—A white female, aged 35 years, had complained of numbness with inability to use the hands for eighteen months, also numbness of the feet and legs, and staggering gait; there had been incontinence of urine for two months. She had had a sore tongue for eighteen months, and a slight anemia for eight months, which had been treated with a liver diet. Examination showed a marked ataxia, loss of joint sense in the toes, loss of vibratory sense in the lower extremities, with exaggerated knee and Achilles reflexes. There was impairment of superficial sensations in areas over the trunk and extremities. There was no anemia, the patient having been under treatment with liver.

Conclusions

Nervous and mental symptoms are among the most frequent, and often the earliest manifestations of the disease known as pernicious anemia. All parts of the nervous system, brain, cord and nerves may be involved. The anemia and nervous symptoms are both preceded by achlorhydria; when unexplained, this should be treated in the hope of preventing this disease.

In a typical case diagnosis can often be made before the blood shows marked changes, and prompt treatment may even prevent severe anemia. The specific etiology of the lesions in the nervous system is unknown. The prognosis concerning the nervous disorders is questionable, but the indications are that patients should be treated with large amounts of whole liver for many months, together with a high vitamin diet. Foci of infection should be removed, sunlight or ultra-violet light may also be of value. Symptomatic treatment should include re-educational exercises, heat and massage to the extremities. With early and persistent treatment marked improvement, if not cure, may be obtained.

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PROCEEDINGS OF THE GENERAL
MEETINGS
of the
EIGHTY-SECOND ANNUAL SESSION
OF THE MEDICAL ASSOCIATION
OF GEORGIA

Atlanta, May 12-15, 1931

FIRST DAY—MORNING
Wednesday, May 13

The first general meeting was held in the Ball room of the Atlanta Biltmore Hotel, and was called to order at 10:05 by the President, Dr. G. Y. Moore, Cuthbert.

The President invited all Ex-Presidents in the audience to take seats on the platform, and declared the Eighty-Second Annual Session of the Medical Association of Georgia duly opened.

Invocation: Rev. Marion McHenry Hull, Atlanta.

Our Father, God, we come to Thee this morning at the beginning of this session not, we hope, as a mere formality, or because it is the custom to open public gatherings with prayer, but in a spirit of dependence on Thee. We thank Thee for the knowledge Thou hast given us of the human body, for the knowledge of the forces that work against it and of the forces we may use to combat its enemies, and in dependence on Thee we come asking that Thou wilt give us further knowledge, and wilt bestow a blessing upon us for the bodies and minds of men. We hope that Thou wilt give us wis-

dom, because we confess our ignorance of many things we should know. We have been taught to ask of God, who giveth liberally and upbraideth not, and we hope that every man, whether of large or of limited experience, will while in attendance here, learn something that will aid him in the future in his work, and we trust that in the future when we confront difficult problems we will lean upon Thee more and more when conditions depend upon our knowledge and our skill. Be Thou the physician of the soul as well as of the body, and may we serve and grow more like Thee day by day, we ask for Jesus' sake. Amen.

Address of Welcome: Dr. George M. Niles, Atlanta.

Mr. President and Gentlemen of the Medical Association of Georgia: It is my pleasant duty to welcome you here on behalf of the Fulton County Medical Society and, in its larger sense, to the entire City of Atlanta, which numbers quite a few thousand souls. Atlanta is delighted to have you here and I give you welcome. It seems to me an address of welcome should be brief and if I have any merit at all I trust it is the merit of brevity.

An English poet of the last century, Crabbe, wrote these lines:

*"A tale should be judicious, clear, succinct,
The language plain and incidents well
linked,*

*Tell not as new what everybody knows,
But new or old, still hasten to a close;
There, centering in a focus nice and neat,
Let all your rays of reason meet."*

The focus to which I am striving is the word "Welcome". I believe you will find a welcome mirrored in the faces of all with whom you come in contact here, from the humble bell hops up the line to our dignified and august President of the American Medical Association, who has honored us with his presence.

We have prepared for you a varied assortment of entertainment, suiting your tastes, and I think we can suit every taste, both grave and gay. For those who are scientifically-minded we have a program which I think you will find to be a feast of reason and a flow of soul. We also have many scientific exhibits which will please your eyes and stimulate your interest.

For those of you who are golf-minded there are almost innumerable golf links around Atlanta. Your badge will give you entrance to any of them and you can go out and show your prowess at the ancient and honorable Scotch game.

For those who are air-minded, let me call your attention to Candler Field, where you

will find planes available at all hours and you can soar up into the limitless ether to your heart's content.

For those who are moving picture-minded, you can find anything from the romantic love stories to the mystery plays or crook dramas at our motion picture houses. There are plenty of pictures and talkies and you can find anything that appeals to you.

For those who are gun-minded, the Atlanta Gun Club extends an invitation to come out and indulge in trap shooting as their guests. Some of you may care to do that.

We are glad to have you here, we want you to have a good time and will bend every effort toward that end. When you leave us we want you to leave with a pleasant taste in your mouth, and we want you to hurry back.

Response to Address of Welcome: Dr. William H. Myers, Savannah.

Mr. President, Members and Guests of the Medical Association of Georgia: To be welcomed is to be received gladly into one's presence or companionship. We believe that your cordial welcome includes all that this definition implies. For that reason it gives me great pleasure to respond, on behalf of the Association, and to express our deep appreciation for the privilege of enjoying the hospitality which awaits us.

We are always pleased to meet in Atlanta, for you have a marvelous city, endowed by Nature in the excellence of your climate, in the advantage of your location, in the abundance of your wealth, in the beauty of your hills and, above all, in the character of your people. In addition to these natural gifts you have made this, by your progressiveness, the commercial and industrial, as well as the educational, center of the South. Your Society has played no small part in bringing about these changes, and in extending the fame of this metropolis. History is enriched and our profession adorned by many names which the rolls of your membership bear. Some of these are "Gone—flitted away", but your fame does not rest with these alone for you have many among you, pre-eminent in the science of medicine, who will bear the torch, undimmed, to pass on to another generation. These attributes of mind have won renown for you, and brought you fame, but the reason we like you and your city lies in the nature of your hearts and your unfailing generosity and cordiality toward your guests. Let us hope that the friendships formed and cemented at this meeting will be those of which it may be said—"Endurance is the crowning quality."

Again, we thank you.

The President: Gentlemen, we are honored today, and it is an honor and a delight to present to you Dr. Williar Gerry Morgan, President of the American Medical Association.

Dr. William Gerry Morgan: Mr. President, guests and members of the Medical Association of Georgia:

It is really a rare privilege to me to come back to Atlanta, a city in which I feel at home, and a city which I always leave with regret, and always with the feeling that I gain from my hosts—that I have not been a bother to them. That always is a dangerous feeling to leave in the heart of the departing guest, for it always lays seed for a repetition of the visit. It is a peculiarly keen and sincere pleasure to have the privilege of meeting with and meeting the members of the Medical Association of Georgia. Doctor Myers has expressed in a beautiful way what the men throughout the country feel, and that is that the Georgia profession stand well in the front ranks of the profession throughout the country.

I am proud to be a member of the Southern Medical Association. I had the privilege, when I first entered the House of Delegates of the American Medical Association, to definitely throw the District of Columbia into the Southern column. As you all know, we have a little habit in the House of Delegates, when important matters are going to be acted upon, of segregating and talking it over among the friends from each section to see how the thing is going to work out for us. The delegate from the District of Columbia in former years had foregathered with the northern delegates, but when I had the privilege of meeting with them I felt that Washington was more Southern than Northern and I asked the privilege of being taken into the Southern group. That is where we stand now and I am sure will always stand.

I think this is the time for "closed season" to be declared on chronic speakers, and certainly after having met with forty-four state societies I can be classed in that category, so I will yield to that rule and thank you for my invitation and for the very cordial and delightful welcome which I am receiving.

President Moore called attention to the rules governing the reading of papers and the time allotted for discussion, and requested Vice-President, Dr. George A. Traylor, Augusta, to take the chair.

SCIENTIFIC PROGRAM

Dr. George L. Echols, Milledgeville, read a paper entitled "Etiology of Mental Diseases". Discussed by Drs. Roger C. Swint, Milledgeville; Henry D. Allen, Jr., Milledgeville; J. N. Brawner, Atlanta; C. C. Harrold,

Macon; Arthur D. Little, Thomasville, and in closing by Doctor Echols.

Secretary Bunce announced that the Pediatric Society of Georgia would meet at luncheon at 12:30, and called attention to the summer clinical courses offered by the University of Georgia, Emory University, and the State Board of Health.

Dr. E. C. Thrash, Atlanta, read a paper entitled "Legalized Surgical Prevention of Reproduction in the Unfit". Discussed by Drs. J. N. Brawner, Atlanta; W. R. Dancy, Savannah; Roger C. Swint, Milledgeville; T. F. Abercrombie, Atlanta; J. L. Campbell, Atlanta, and in closing by Doctor Thrash.

President Moore resumed the chair.

Dr. W. S. Goldsmith, Atlanta, read a paper entitled "Acute Appendicitis in Elderly Patients". Discussed by Drs. C. C. Harrold, Macon; Grady N. Coker, Canton; Stewart R. Roberts, Atlanta; Floyd W. McRae, Atlanta; Robert L. Rhodes, Augusta; George W. Fuller, Atlanta, and in closing by Doctor Goldsmith.

President Moore requested Dr. James E. Paullin, Chairman of the Abner Wellborn Calhoun Lectureship Committee, to introduce at this time the guest speaker, Dr. James B. Herrick, Chicago.

Doctor Paullin: Mr. President, Members of the Medical Association of Georgia:

It is peculiarly fitting that on this occasion of the eighty-sixth anniversary of the birth of Abner Wellborn Calhoun this great body of medical men should meet in his home city and pay tribute to his memory by the establishment of the Abner Wellborn Calhoun Lectureship. As our guest for today we have one of the most distinguished men in internal medicine that the country has produced. My first acquaintance with Doctor Herrick was many years ago when, as a medical student, in making ward rounds he was in company with Sir William Osler. My acquaintance with him was soon ripened by the publication of a most interesting article of his on coronary occlusion, in which he demonstrated that it was not only possible to make a clinical diagnosis, but that many patients with acute occlusion of the coronary artery survived and lived thereafter. His contributions to medicine have been many. Particularly have his interests been centered to a considerable extent on diseases of the heart, and he has written many valuable papers on this condition. Not only th's, but his interest has been equally keen in diseases of the blood, and he was the first to describe, in this country, sickle cell anemia.

Doctor Herrick belongs to that very fortunate class of practitioners who have learned in the early years the advantages which come to one by careful study of their patients, care-

ful correlation of data, careful post-mortem examinations, and the necessity of these things in the advancement and progress of medicine. He is a wonderful clinician, a most delightful gentleman, and one of the outstanding teachers of medicine in this country. His students, while he was connected as Professor of Medicine at Rush Medical College, are scattered throughout this whole civilization, and it is today with the greatest of pleasure that the Lectureship Committee presents to you Dr. James Bryan Herrick, Emeritus Professor of Medicine, Rush Medical College, Chicago.

Doctor Herrick: Mr. President, Doctor Paullin and Members of the Association: As I listened to this laudatory and flattering introduction of Doctor Paullin's I wondered who the man was, but I still think I am the one who is expected to speak to you, in spite of the flattering remarks. I must, Mr. President, thank you and through you the members of the Association, for having invited me to deliver this lecture. I regard it as an honor and esteem it as a high privilege, and I express to you my most hearty thanks.

Doctor Herrick then presented a paper entitled "Common Errors in the Treatment of Heart Disease".

Dr. Stewart R. Roberts: It was much easier for Doctor Herrick to come down here to Atlanta nowadays than it was in the sixties, and he crossed the Smith and Wesson line (formerly the Mason line) to a warm welcome. I happen to be an alumnus of the University of Chicago and I doubly welcome him personally, but I am sure I speak your minds when I say we should greatly appreciate the judgment of Doctor Paullin and his committee in giving us such a marvelous clinician. This address is a classic, and if you want another I can heartily recommend Doctor Herrick's little book on the stethoscope.

I move that we arise and give Doctor Herrick a Georgia appreciation and thanks for his presentation.

Motion seconded and unanimously carried.

Secretary Bunce announced that immediately after adjournment a group picture would be taken at the East entrance of the Biltmore.

He further announced that the papers omitted on the program for the morning would be taken up the first thing in the afternoon, and that Governor Hardman would keep open house at the Executive Mansion from 3:00 to 5:00 and would be glad to welcome any and all who wished to go out.

The President declared the meeting ad-

journed at 1:00, to reconvene at 2:00 p.m.

FIRST DAY—AFTERNOON

The Association reconvened and was called to order at 2:10 by Ex-President, Dr. W. R. Dancy, Savannah.

Dr. S. P. Kenyon, Dawson, read a paper entitled "A Discussion of Hypertension". Discussed by Drs. Stewart R. Roberts, Atlanta; J. A. Redfearn, Albany; Lewis M. Gaines, Atlanta, and in closing by Doctor Kenyon.

Vice-President, Dr. S. T. R. Revell, Louisville, took the Chair.

Dr. William A. Smith, Atlanta, read a paper entitled "Neurological Symptoms in Pernicious Anemia". (No discussion.)

MEDICAL CLINICS

Dr. James J. Clark, Atlanta, gave a dry clinic on "X-Radiation as an Aid in Treatment of Menopausal Disturbances".

Dr. Roy R. Kracke, Emory University, discussed "The Clinical Value of the Schilling Blood Count". Discussed by Drs. J. C. Norris, Atlanta, and in closing by Doctor Kracke.

Dr. Cyrus W. Strickler, Atlanta, discussed "The Treatment of Pneumonia".

Dr. C. C. Aven, Atlanta, presented several patients and discussed "Diseases of the Chest".

Dr. H. Cliff Sauls and *Dr. Carter Smith,* Atlanta, discussed "The Clinical Use and Value of the Electrocardiograph: Case Reports With Illustrations".

Dr. Lewis M. Gaines, Atlanta, gave a clinic in "Encephalitis".

Dr. Howard Hailey, Atlanta, gave a Dermatological clinic and presented several patients with various types of nevi.

The Chairman declared the meeting adjourned at 5:20 p.m.

SURGICAL CLINICS

The Surgical Clinics were given in the Pompeian room of the Atlanta Biltmore, and the meeting was called to order at 2:15 p.m. by Vice-President, Dr. G. A. Traylor, Augusta.

Dr. Michael Hoke, Atlanta, discussed "Hallux Valgus".

Dr. Lawson Thornton, Atlanta, discussed "Sacro-Iliac Joint Fusion", presenting case reports.

Dr. Theodore Toepel, Atlanta, discussed "Bone and Joint Tuberculosis in Children".

Dr. Frank K. Boland, Atlanta, discussed "The Treatment of Pulmonary Tuberculosis by Surgical Collapse".

Dr. Charles E. Dowman and *Dr. E. F. Fincher, Jr.,* Atlanta, presented a clinic on "Neuro-Surgery".

Dr. D. Henry Poer, Atlanta, discussed

"The Treatment of Acute Empyema by the Closed Method".

Dr. Thomas P. Goodwyn and Dr. H. W. Jernigan, Atlanta, discussed "Some Problems in Handling the Fractured Femur", illustrated by motion pictures.

The meeting was declared adjourned at 5:00 p.m.

FIRST DAY—EVENING

The Association met and was called to order at 8:30 p.m. by the President, Dr. G. Y. Moore, Cuthbert.

The President announced the accidental death in New Orleans of Dr. R. C. Lynch, and requested Dr. C. W. Roberts to take the chair.

Dr. J. C. Patterson, Cuthbert, presented to Dr. G. Y. Moore, President, the "Badge of Service".

President Moore then resumed the chair and requested Dr. Frank K. Boland to introduce one of the guest speakers, Dr. Charles M. Rosser, of Dallas, Texas.

Doctor Boland: Our speaker this evening has two great heredities, one to be the son of a minister and the other to be a son of Georgia. He was born in Cuthbert, migrated to Texas, and there he has made a great name for himself as a citizen and as a physician. It is a great pleasure to welcome him and to introduce to you Dr. Charles M. Rosser, Professor of Clinical Surgery at Baylor University, College of Medicine, Dallas, Texas.

Doctor Rosser then addressed the Association on "The Menace of the Medical Underworld".

The President requested Dr. C. W. Roberts to introduce the other guest speaker, Dr. William Gerry Morgan, of Washington, D. C.

Doctor Roberts: The function of the one chosen to introduce the next speaker is to allow you a moment of relaxation. These men come to us with a serious message. We who introduce them give you an opportunity of relaxing for a few moments. It is peculiar that in a democratic country like ours we have been taught to look upon educated men as belonging to the intelligentsia. I do not know what that means exactly, but I think it has something to do with "highbrows". For a number of years I believed that, but something has changed my opinion. Since Doctor Morgan came in this morning I have learned that he does not belong to the intelligentsia. Although he lives in Washington and is Professor of Gastro-enterology at Georgetown University, School of Medicine, and is President of the American Medical Association, although he has these titles attached to his name he was born perhaps in

a small town up in Connecticut, and practiced medicine with a small bag up in Connecticut, as you and I did here, and after all, he is just a fine personality, hale and hearty fellow well met, happy always to have you step up and shake his hand.

This is the first time, so far as my memory goes, that we have been honored by a visit from the President of the American Medical Association. I cannot speak positively, but can say that at least since 1910 we have not had a president of the American Medical Association attend one of our sessions. It is a happy privilege, then, to have with us a man who speaks our language, who understands us and whom we can understand, who comes down to speak to us, and if there were magic words that did not elude me I would gladly use them, but having arrived at a point where the magic words do elude me I will just present to you, Doctor Morgan.

Dr. William Gerry Morgan: It seems a pity that I should come between you and the really true and important message that you have had from Doctor Rosser. It is often my duty, and sometimes my pleasure, to sit and listen to addresses that come before mine on a program, but not often do I feel that I have received something that will be of benefit to me and my home society. Tonight I have had that experience, and I feel that I cannot be quite satisfied until I entice Doctor Rosser up to the capital of the Nation and have him give first hand the message he has given to us tonight. I thank him personally for the privilege of having heard it.

Doctor Morgan then addressed the Association on "The Control of Medicinal Alcohol as it Affects the Practitioner and the Public".

The President thanked the speakers on behalf of the Association and declared the meeting adjourned at 10:10 p.m.

Thursday, May 14, 1931

SECOND DAY—MORNING

The Association reconvened and was called to order at 9:10 a.m. by the President, Dr. G. Y. Moore, Cuthbert.

Secretary Bunce gave an abstract of the proceedings of the House of Delegates at its various meetings and stated that the minutes would be published in full in the Journal.

Dr. M. A. Clark moved that the action of the House of Delegates be ratified. Motion seconded by Dr. J. O. Elrod and unanimously carried.

SCIENTIFIC PROGRAM

Dr. Julian H. Buff, Atlanta, was not present to read his paper on "Foreign Bodies in the Respiratory Tract".

Dr. Murdock Euen, Atlanta, asked the privilege of presenting some pictures that had been prepared for the discussion of this paper.

President Moore asked the Parliamentarian for a ruling, and Dr. M. A. Clark ruled that for the rest of the papers on the program were in order and if Doctor Buff was present at the end of the program his paper could be presented at that time.

Dr. Montague L. Boyd, Atlanta, read a paper entitled "Organized or Group Medicine". Discussed by Drs. R. Hugh Wood, Atlanta; Lewis M. Gaines, Atlanta; C. H. Richardson, Jr., Macon, and in closing by Doctor Boyd.

Dr. Julian K. Quattlebaum, Savannah, presented a paper on "Cancer of the Stomach". Discussed by Drs. Cleveland Thompson, Millen; W. L. Cooke, Columbus; E. L. Bishop, Atlanta; Thomas Harrold, Macon; Robert L. Rhodes, Augusta, and in closing by Doctor Quattlebaum.

President Moore announced that it had been agreed between Doctor Landham and Doctor Yampolsky that they would exchange places on the program.

Dr. Joseph Yampolsky, Atlanta, read a paper entitled "Recent Advances in the Prevention and Treatment of Diseases of Children". Discussed by Drs. William A. Mulherin, Augusta; M. M. McCord, Rome; W. W. Anderson, Atlanta; Wm. H. Kiser, Atlanta; H. R. Slack, LaGrange; R. T. Dorsey, Atlanta; L. C. Allen, Hoschton, and in closing by Doctor Yampolsky.

Vice-President Traylor took the chair and requested Dr. M. A. Clark, Macon, to report to the Association on the status of the "Medical History of Georgia".

Doctor Clark: The House of Delegates, this morning, instructed me to appear before you at this time, and I ask your indulgence. According to the qualifications given last night to our distinguished guests, I may safely qualify. I went to an old field school, and I taught school. I may have done what they did not say they did—I studied the blue back speller.

I come before you this morning in behalf of our Medical History. I wonder how many of you know how many doctors have been governor of Georgia? I wonder if you know that at one time one doctor refused to be governor of Georgia—that was in days gone by, not now. I wonder if you know how many took an active part in the founding of the University of Georgia? Of course, you all know that a doctor was one of the signers of the Declaration of Independence, but let us come nearer home. You see on your badge the date of the founding of the Society,

but I wonder how many of you could tell me who was the first President and where he lived, and who was the first Secretary and where he lived. Coming down a little nearer, I wonder how many could tell me the year in which the present plan of organization was adopted by the Medical Association of Georgia. Who were the first Councilors? At that time we had eleven districts. Who was the first Chairman of the Council? Remarkable to say, gentlemen, the first Chairman of the Council is addressing you now, and may I repeat something I have told you before, that at the meeting in Savannah after the reorganization in 1905, of the President, the Secretary, and all of the Councilors, the Chairman of the Council is the only one now living and able to address you. At that time if anyone had asked them who would be the first to go, because of the long, lean, lank appearance, they would have said the Chairman of the Council. For some reason I have been left to serve you.

Now, gentlemen, you have instructed us to prepare a Medical History of Georgia, and to secure a suitable person to prepare the material. Last year we were authorized to secure patrons, at \$10.00 each, and we have secured 122 of them. We have secured a well qualified person to arrange the material, and it is ready for publication. We would like to have every member of the Association have a copy in his possession. We wish the financial condition of the Association was such that our governing body could authorize us to publish the book, but the finances are in such condition that it is not possible to authorize us to do this. I may remark that with Fifteen Hundred Dollars we can start the publication. We would like to have as many of you as possible become patrons, and have your names appear on the list of patrons which will be placed in the volume. We find that for the sum of \$5.00 each for the book we can go ahead with the publication and place it at your disposal. I dislike to do this, but in after years you will be glad that you have this History, and in a few more years, when some of the old ones are gone and you pick up the book and refresh yourselves on the proceedings of former years, you will have an appreciation and perhaps a more kindly feeling regarding some of the things they did, and in that you will have an inspiration to carry on and make the Medical Association of Georgia even better than it is.

When you go back home, strain a point to become patrons and send in the \$10.00, which will entitle you to this honor. Those of you who do not wish to do this I hope will send in \$5.00 for a copy of the book,

and just as soon as we receive sufficient money to enable us to start the publication we will do so. We should not put this matter off any longer, it seems to me, and it is up to you now to put your committee in a situation so that we may start. Times will improve, and each day from now on as you get a little extra money, if you do not feel like putting out the whole \$10.00, or the whole \$5.00 at once, if you will put a little aside each day you will be surprised to see how soon it will accumulate. I am sure you would not wish your committee to assume the burden of publication, so let me appeal to you, as members of the Association, to make a little sacrifice, if necessary, to secure this book, which you will value the rest of your lives. In after years I am sure posterity will enjoy reading and realizing the part you have played in the development of medicine in Georgia.

Dr. Jackson W. Landham, Atlanta, read a paper entitled "The Management of the Menopause".

The discussion of this paper was postponed until after the reading of the President's address.

At 12:00 noon, President Moore delivered his presidential address, entitled "Pushing Back the Frontiers".

Dr. Frank K. Boland was granted the privilege of the floor and called attention to the presence of a representative of the Southern Medical Association, who was prepared to issue membership cards to all who wished to join that organization.

The President then resumed the chair.

Doctor Landham's paper was then discussed by Drs. James K. Fancher, Atlanta; George A. Traylor, Augusta; L. C. Allen, Hoschton, and in closing by Doctor Landham.

Dr. M. F. Haygood, Alto, read a paper entitled "Integrating the Services of Public Health Agencies and Private Practitioners in the Control of Tuberculosis". Discussed by Drs. Champ H. Holmes, Atlanta; Hal M. Davison, Atlanta; J. W. Simmons, Brunswick, and in closing by Doctor Haygood.

Secretary Bunce announced that all members of the Georgia Urological Association were invited to attend a luncheon in one of the private dining rooms on the Mezzanine Floor, and that all those interested in trap shooting were requested to meet at the registration desk immediately after adjournment of the morning meeting.

The Secretary further announced that the Section on Surgery would meet in the Pompeian room at 2:00 p.m., and that there would be a motion picture demonstration in

the Ball room following the completion of the program in the afternoon.

The meeting was declared adjourned at 1:25 p.m., to reconvene at 2:00 p.m.

SECOND DAY—AFTERNOON

Section on Medicine

The Section on Medicine met and was called to order at 2:15 p.m. by Vice-President, Dr. S. T. R. Revell, Louisville.

Dr. Neal Kitchens, Warm Springs, read a paper entitled "The Result of Ten Years' Work on Rural Sanitation". Discussed by Dr. M. A. Fort, Bainbridge.

Doctor Kitchens requested that he be permitted to utilize the five minutes allowed him for closing the discussion on his paper to discuss the paper on hypertension that was read on Wednesday.

The Chairman asked for an expression of opinion from the audience.

Dr. R. T. Dorsey moved that Doctor Kitchens be granted five minutes for the discussion of hypertension.

Motion seconded and carried and Doctor Kitchens discussed the paper of Doctor Kenyon, which was read on Wednesday morning.

Dr. W. W. Chrisman and *Dr. Charles C. Hinton*, Macon, presented a paper entitled "Agranulocytic Angina". Discussed by Drs. R. T. Dorsey, Atlanta; William L. McDougall, Atlanta; Roy R. Kracke, Emory University; Beecher DuVall, Atlanta; Lee Howard, Savannah; Charles C. Hinton, Macon, and in closing by Doctor Chrisman.

Dr. Newdigate M. Owensby, Atlanta, read a paper entitled "Progress in Psychiatry". Discussed by Dr. George L. Echols, Milledgeville; and in closing by Doctor Owensby.

Dr. Lee Howard, Savannah, read a paper entitled "Bacteriological Facts and Fancies". Discussed by Drs. John Funke, Atlanta; Ralston Lattimore, Savannah; Roy R. Kracke, Emory University; James E. Paullin, Atlanta; and in closing by Doctor Howard.

Dr. James E. Paullin, Atlanta, presented a paper on "Diagnosis of Abdominal Tumors", and demonstrated two patients. Discussed by Drs. Jack C. Norris, Decatur; Lee Howard, Savannah; (no closing remarks).

Dr. Joseph C. Massee, Atlanta, read a paper entitled "Tularemia Studies in Georgia". Discussed by Drs. Walter C. Goodpasture, Atlanta; P. H. Askew, Nashville; T. F. Sellers, Atlanta; George L. Echols, Milledgeville, and in closing by Doctor Massee.

The Chairman called attention to the presentation of motion pictures on gynecological conditions, and declared the meeting adjourned at 5:40 p.m., to reconvene in general meeting at 8:30 a.m., Friday.

SECOND DAY—AFTERNOON

Section on Surgery

The Surgical Section of the Medical Association of Georgia met in the Pompeian room of the Biltmore Hotel, Atlanta, on Thursday, May 14, 1931, and was called to order at 2:15 p.m. by the First Vice-President, Doctor George A. Traylor, Augusta.

Dr. R. M. Harbin, Rome, read a paper entitled "Unexpected Post-operative Infections", which was discussed by Drs. Ben H. Clifton, Atlanta; T. C. Davison, Atlanta; George Y. Massenburg, Macon; W. A. Selman, Atlanta; George A. Traylor, Augusta; and by Doctor Harbin in closing.

The paper of Drs. T. C. Davison and Edgar Boling, Atlanta, entitled "Caesarean Section Under Local and Spinal Anesthesia", (illustrated by moving pictures) was read by Doctor Davison and was discussed by Drs. R. A. Bartholomew, Atlanta; George Y. Massenburg, Macon; Garnett W. Quillian, Atlanta; Charles H. Richardson, Jr., Macon; W. L. Ballenger, Atlanta; Stewart D. Brown, Royston, and by Doctor Davison in closing.

Dr. Arthur D. Little, of Thomasville, read his paper entitled "Fibromatous Tumors of the Mesentery, with Case Report", (illustrated by moving pictures) which was discussed by Drs. Olin S. Cofer, Atlanta; and George Fuller, Atlanta, and in closing by Doctor Little.

Doctor Davison announced that the moving picture machine and operator were furnished to the Section through the courtesy of the Petrolagar Laboratories, Inc., Chicago.

Dr. B. T. Wise, Americus, read a paper entitled "Transplantation of Ureters for Exstrophy of the Bladder—Case Report", (illustrated by lantern slides), which was discussed by Drs. W. A. Selman, Atlanta; Archibald Smith, Atlanta, and by Doctor Wise in closing.

Dr. J. H. Kite, Decatur, read a paper entitled "The Treatment of Congenital Club-foot" (illustrated by moving pictures), which was discussed by Drs. John D. Blackburn, Atlanta; Henry M. Michel, Augusta; Theodore Toepel, Atlanta, and by Doctor Kite in closing.

Dr. Robert C. Pendergrass, Americus, read a paper entitled "Metastatic Pulmonary Carcinoma" (illustrated by lantern slides), which was discussed by Drs. Lila M. Bonner, Atlanta; Rupert H. Fike, Atlanta, and in closing by Doctor Pendergrass.

Because of the lateness of the hour, Dr. George A. Williams, Atlanta, filed his paper, entitled "An Atavistic Human Foot", without reading it.

SECOND DAY—EVENING

The Annual Banquet was held at the Atlanta Biltmore Hotel at 7:00 p.m., with Dr. T. C. Davison as Toastmaster.

At the close of the banquet the Crawford W. Long Memorial Prize was presented to Dr. H. M. Tolleson, Habira, by Dr. William R. Dancy, Savannah, Chairman of the committee.

The banquet was followed by the President's reception and dance.

Friday, May 15, 1931

THIRD DAY—MORNING

The Association reconvened and was called to order at 8:35 a.m. by the President, Dr. G. Y. Moore, Cuthbert.

The first three papers were presented as a "Symposium on Urology".

"The Advantages and Disadvantages of Uroselectan in Urological Diagnosis." Drs. E. G. Ballenger, O. F. Elder, and H. F. McDonald, Atlanta.

"The Significance of Pus in the Urine." Dr. W. A. Upchurch, Atlanta.

"The Treatment of Syphilis." Dr. W. B. Emery, Atlanta.

These three papers were discussed together by Drs. Earl H. Floyd, Atlanta; William F. Reavis, Waycross; Stephen T. Brown, Atlanta; S. T. R. Revell, Louisville; George L. Echols, Milledgeville; Ross Brown, Chicago, Ill.; E. G. Ballenger, Atlanta; W. A. Upchurch, Atlanta, and W. B. Emery, Atlanta.

Dr. C. H. Richardson, Jr., Macon, read a paper entitled "Some Observations on Spinal Anesthesia". Discussed by Drs. George Fuller, Atlanta; Frank K. Boland, Atlanta; William H. Myers, Savannah; C. W. Roberts, Atlanta; Archibald Smith, Atlanta; T. C. Davison, Atlanta, and in closing by Doctor Richardson.

Dr. E. C. Thrash was granted the privilege of the floor and stated that Dr. B. T. Beasley had done a splendid piece of research work, probably one of the best that had been done in Georgia, and had prepared a paper, but presented his title too late to have it included in the regular program.

Doctor Thrash moved that the paper be read by title and accepted for publication in the Journal. Motion seconded and unanimously carried.

Secretary Bunce moved that the same consideration be extended to the paper of Dr. George A. Williams, which was not reached in the Section on Surgery on Thursday afternoon.

Motion seconded and unanimously carried.

Dr. Walter R. Holmes, Atlanta, read a paper entitled "Trichonomas Vaginalis Va-

ginitis—A Common Cause of Leucorrhea". Discussed by Drs. O. H. Weaver, Macon; A. H. Hilsman, Albany; S. T. R. Revell, Louisville; Lee Howard, Savannah; C. H. Richardson, Jr., Macon, and in closing by Doctor Holmes.

Dr. Marion C. Pruitt, Atlanta, read a paper entitled "Etiology and New Method of Surgical Treatment for Pruritus-Ani". Discussed by Drs. William H. Myers, Savannah; Beecher DuVall, Atlanta; H. S. Alden, Atlanta, and in closing by Doctor Pruitt.

President Moore declared a recess of five minutes before proceeding to the election of officers at 12:00 noon.

ELECTION OF OFFICERS

The Association was called to order promptly at 12:00 o'clock by the President, who called attention to the provisions of the Constitution and By-Laws governing the election, and requested Ex-Presidents W. A. Mulherin, J. O. Elrod, Frank K. Boland, and William R. Dancy to act as tellers.

The following officers were then balloted upon and declared duly elected:

President-Elect, Marvin M. Head, Zebulon.

First Vice-President, Marion C. Pruitt, Atlanta.

Second Vice-President, H. M. Tolleson, Hahira.

Parliamentarian, M. A. Clark, Macon.

Delegate to A. M. A., O. H. Weaver, Macon.

Alternate to A. M. A., C. K. Sharp, Arlington.

Councilors

Fifth District, E. C. Thrash, Atlanta.

Seventh District, M. M. McCord, Rome.

SELECTION OF MEETING PLACE FOR 1932

An invitation was extended by Dr. Julian Quattlebaum, on behalf of the Chatham County Medical Society, to meet in Savannah in 1932.

Upon motion of Dr. M. A. Clark, regularly seconded and carried, this invitation was accepted by rising vote.

INSTALLATION OF OFFICERS

President Moore appointed Doctor McCurdy and Doctor Ayers to escort Doctor Fort and the newly elected President-Elect to the platform.

Dr. Moore: President Fort, I take great pleasure in turning over to you the affairs of the Medical Association of Georgia. In doing so I pledge our support and best wishes. I wish to express to you my appreciation of the co-operation you have given me. A faithful friend is our best gift, and the most I can do for my friend is simply to be his friend.

The gavel which I turn over to you will be wielded, I know, to the good of the Medical Association of Georgia.

Dr. Arthur G. Fort: No greater assistance could have been given to the President-Elect than has been given to me by you, Sir, Doctor Moore, and by our Secretary, Doctor Bunce. The high position which I hold was given me at your hands last year. It is with profound appreciation I accept this honor and ask the sympathetic co-operation of the county units, the district units, and the entire Medical Association of Georgia.

The plan of serving one year as President-Elect is a good one. During that year your officer is a student visiting, by courtesy, the different units, serving on the different committees of our Association, thereby gaining an insight into affairs and conditions which should serve him in his capacity as President.

Our policy will be to serve as you instruct, but to ask that your instructions be well studied before presentation. We are being criticized from many angles; never have so many articles been written which take us to task. Many false statements are openly and frankly made. Charges of fee splitting, careless medical insurance examinations, too high fees, etc. There is just sufficient truth in many of these attacks to prevent our branding them as entirely false; but where can one find so little of the bad in so large a number as one does in our own ranks? I dare say, nowhere.

Let us "Hands off" all general political affairs of medicine and strengthen ourselves by selling our profession by service, and that of so high a standard that these attacks will act as a boomerang.

While doing this, let our unit organizations strengthen themselves and begin at the bottom to build. The people are demanding good medical care. They expect to get it and will have it. If clinics are the answer, then let our county societies organize and handle these clinics. The State Board of Health is in sympathy with us and go only as far as they have to, having in mind that some things must be done and some lawfully organized means are necessary. Do not be afraid of them; serve in such a way that they will not find it necessary to step in.

Is the position we are in our fault; the fault of our having perfected ourselves to a point we are essential, or the fault of not properly organizing and handling the giving of our services?

Take stock; see that the expense of medical care is evenly and properly distributed, and then the cry of high costs will vanish. Some means of bringing this about will be

found, and we must be ready for it and should guide the way.

I am, therefore, asking you to see that your local units are ready to help solve these problems facing us.

I have asked the permission of appointing a committee to investigate the situation as it exists in our state and to report back to us its findings and recommendations.

Dr. Marvin M. Head: Mr. President, Fellow Members of the Medical Association of Georgia: I have no speech, I have nothing except what I have had for you for twenty-five years, and that is hard work for the Medical Association of Georgia. I want you all to understand that I appreciate you, and I love you, and I will do anything in the world that is not low-down for the members of this Association.

President Fort requested Doctor Coker to present Dr. Marion C. Pruitt, the First Vice-President.

Doctor Pruitt: Mr. President, I appreciate the honor of being elected First Vice-President of this Association. I hope each of you has had a good time while in Atlanta. The various committees, of which I was general chairman, have functioned so harmoniously that my part of the work has been most pleasant, and if you have had a good time here I hope you will give credit to the various committees who have been so faithful and so ready to do their part of the work. I wish to pledge my future efforts, whatever they may be in the future, to the good of the organization.

President Fort requested Doctor Coleman to present Dr. H. M. Tolleson, Second Vice-President.

Doctor Tolleson: Mr. President, Fellow-members of the Association: During the past year, while I was carrying on this political campaign, I planned a long speech, but on the way up here someone nudged me and asked me to make it short. Even if I did not want it short I could not do anything else now. I am glad I was not elected First Vice-President. This is my first attendance at an election of officers and, seriously, I was overcome by the shock of my election to any office and have not recovered. I will seriously attempt to find out what my duties are. I asked someone in the back of the room what my duties would be and was told "Nothing". If that is so I am well qualified for the position. I shall do my best, in any event, not to be too big a disappointment.

President Fort requested Doctor Thrash to present Dr. M. A. Clark, the Parliamentarian.

Doctor Clark: A prominent member of

the Association, and my good friend, remarked some years ago that "When Clark dies he will die of a 'Constitutional' disorder". I hope the Constitution of the Medical Association of Georgia will be in such condition that his departure will not affect it. When you presented to me several years ago the "Badge of Service" I took it literally and seriously, as I am apt to do. I did not realize then that you would require of me the services that you have required, but I am profoundly grateful to you for the confidence you show in me, and for the forbearance you have shown during the few years I have served as your parliamentarian. I have frequently doubted my ability to have the tact and the wisdom to interpret or to rule for the best of this Association. In these years of experience, nine, that you have given me I have learned much, and now that I must serve three more perhaps I can do better. Let me remind you that in serving it is a service for this Association that I love, and for you whom I love, and that although I may displease at times it will be an error not of the heart, but of the head. I pledge myself to do my best, and as each day goes by and the best is done that day I will try to do a little better the next day, and after a while when the "Constitutional disorder" has taken me away, perhaps the Association will think kindly of me because I tried to serve you faithfully and well.

President Fort requested Doctor Richardson to present Dr. O. H. Weaver, Delegate to the American Medical Association.

Doctor Weaver: Mr. President, Gentlemen: I wish to express my appreciation to you for your approval as your representative.

President Fort: I regret that we cannot present Doctor Sharp at this time, but I know he is absent because of some good reason, for he very rarely ever misses a meeting. Is there any further business?

Dr. C. H. Richardson, Jr.: I move you, Sir, that the Medical Association of Georgia extend to the Fulton County Medical Society, a sincere vote of thanks for their splendid entertainment, and our appreciation to everyone who was concerned in making our meeting such a great success.

Motion seconded by Doctor Dancy and unanimously carried.

President Fort: If there is nothing further to come before us at this time I will declare the Eighty-Second Annual Session of the Medical Association of Georgia adjourned, *sine die*.

ALLEN H. BUNCE, M. D.,
Secretary.

PENCIL-CAP IN LEFT LOWER BRONCHUS; REMOVAL AFTER SIX MONTHS*

MURDOCK EQUEN, M. D.
Atlanta

The removal of foreign bodies from the food and air passages has become of such frequent occurrence that the presentation of a case before this organization requires an explanation. This case, however, I feel, is of peculiar interest on several counts: first, because of the unusual nature of the foreign body: I can find no similar case in bronchoscopic literature; second, because of its long sojourn in the lung; third, because of the peculiar manner in which the object was aspirated, and lastly, because of its being in the left bronchus. As you know the left bronchus is smaller and comes off at a more acute angle than the right; aspiration of foreign bodies into the left bronchus is therefore less frequent than into the right.

A girl, seven years old, was shooting spit-balls through a small cylinder, which she had made by removing the rubber and the wood from a pencil-cap. Upon being suddenly reprimanded by her teacher she tried to swallow the cap; she choked, coughing violently and became cyanotic. Following this incident the child was treated for whooping cough and later pneumonia. Six months afterwards she was seen in the Emory Out Patient Department on account of asthmatic attacks. At that time very loud breathing, whistling in character, could be heard several feet away from patient. According to her mother, no importance had been attached to the story of "swallowing" the pencil-cap. In antero-posterior and lateral roentgenograms, a metallic object, the size and shape of a pencil-cap, the small end pointing downward, was discovered. This was in the left lower main bronchus, on a level with the ninth rib posteriorly.

On the introduction of the bronchoscope a large amount of secretion was noted in the trachea. This was removed by aspiration. About 5 cm. below the bifurcation, the left bronchus appeared to be almost filled with a mass of granulation tissue. This mass rapidly decreased following the application of epinephrine and much of it was removed with forceps before the metallic object came into view. The lumen of the pencil-cap, oddly enough, was still open, thus permitting aeration of the distal portion of the lung. On removing the cap, obstruction was noted, being caused, no doubt, by granulation tissue which had sprung up around it. Following the operation,

*Read before the Southern Section of the American Laryngological, Rhinological, and Otological Society, Memphis, Tenn., January 23, 1931.



Fig. 1—Antero-posterior roentgenogram, showing the pencil-cap back of the heart-shadow.

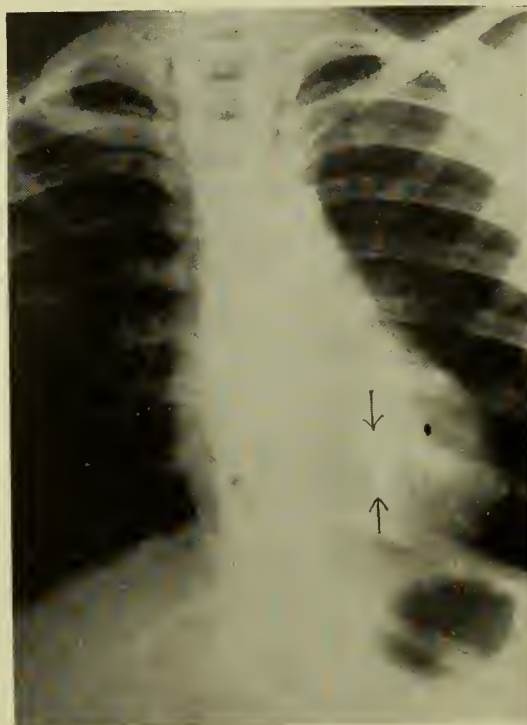


Fig. 2—Lateral roentgenogram.

hemorrhage was controlled by pressure and the application of silver nitrate.

The child made an uneventful recovery and left the hospital on the fifth day. It is an interesting coincidence that, due to the patency of the foreign body

and its peculiar situation in the bronchus, the child could breathe through it.

SACRO-ILIAC PAIN*

Clinic

LAWSON THORNTON, M. D.

Atlanta

By the time one is mature, nature has completed her effort to fuse the sacro-iliac joints. The intervening cartilage of youth will have changed to fibrous tissue of a consistency varying from thin fibrous tissue to osseus fusion.

Any traumatic, bacterial or chemical inflammation of this joint will result in pain—pain which may be correctly interpreted as being in the sacro-iliac joint or referred to the back of thigh and calf of the leg. This error in localization is not uncommon elsewhere. Shoulder pain occurs in gallbladder disease. The knee is the site of pain in diseases of the hip joint. A true sciatic neuritis may accompany pain in the sacro-iliac joint from arthritis or strain, the former evidenced by sensitiveness to palpation along the nerve trunk, and by absence of the Achilles tendon reflex. The sciatic nerve lying almost in contact with the inflamed joint becomes inflamed by contiguity.

Neuroma of the posterior root of the sacral nerve would cause pain referred to the sacro-iliac joint. Epidural injection with 50 to 75 c.c. of normal salt solution would first increase this pain and then clear the pain entirely. This injection would have no effect whatever upon real sacro-iliac joint pain.

Tumors of the lower segment of the spinal cord could also cause pain referable to this joint. The Querkenstedt test would show a blocking or partial blocking of flow of spinal fluid, and a yellow spinal fluid would be found below the site of the growth.

Much hair splitting has been done in formulating a plan to differentiate between lumbo-sacral and sacro-iliac pain, with little gained to clarify the perplexing problem. A

sensitive area is usually found on pressure over the posterior edge of the sacro-iliac joint. Muscle spasm and scoliosis are not uncommon findings. The story, plus one's clinical finding and judgment, is of greatest value in making this diagnosis.

Treatment should always be conservative at first. The joint may be immobilized by any plan desired,—adhesive strapping, belts, or corset.

Postural changes by training or by means of braces may remove straining thrusts and thereby relieve pain. Exercises and general hygiene may improve muscle tone and relieve relaxation of the joint which may follow prolonged disease. Such a relaxation may follow pregnancy and labor.

Foci of bacterial infection, of course, should be sought for and removed. Diet and elimination, plus the general hygienic and hydrotherapeutic regimen which one employs in the treatment of toxic arthritis should be given consideration.

When it is realized that the problem is a recurrent or chronic one, an operation for fusing the joint is indicated. Relief of the joint pain may be expected almost immediately after the operation, and the referred pain a short time later. The true sciatic neuritis could not subside so readily. One would expect a slower healing process.

At first we were at a loss to know why the pain is relieved so soon after the operation. Certainly the joint cannot become fused in less than several weeks. So another cause must be found. The sensory nerves that supply the sacro-iliac joint pass across the posterior edge of the joint along the sacrum, and through the posterior foramina of the sacrum. The operative dissection cuts across these sensory nerves, and evidently relieves the joint pain. Later the joint fuses, the arthritis subsides, thus removing the inflammatory process adjacent to the sciatic nerve. Eventually the nerve itself recovers.

The fusion operation, designed by Doctor Hibbs, of New York, and later independently by Doctor Campbell, of Memphis, will be shown on the screen, to be followed by very brief case reports.

*Informal clinic before the Surgical Section of the Medical Association of Georgia, Atlanta, Ga., May 13, 1931.

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA
Devoted to Welfare of Medical Association of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

AUGUST, 1931

PHYSICIAN'S DIRECTIONS TO PATIENTS

A famous comedian once, when told to take one pill three times a day, replied, "You can't do that". Another, when told to take a spoonful every four hours in water objected to getting into a tub of water that often. This illustrates in light vein how ambiguity or remote reference in directions may cause confusion. In cases where powerful drugs or dangerous poisons are used vagueness in instructing the patient may result in tragedy.

Recently a young woman was told to take a douche with cyanide of mercury. No specific instructions as to the strength of the solution were given, with the result that she used a $7\frac{1}{2}$ grain tablet in three ounces of water. This was sufficiently strong to cauterize the entire vaginal mucosa and produce acute mercurial colitis and nephritis, complicated by intestinal hemorrhage, broncho pneumonia and death. Of course here was a person peculiarly susceptible to mercury, but had she been given more specific directions her death could have been prevented. So in every case where a drug is prescribed which has poisonous, caustic or dangerous action, even when such action is present only in large doses, the patient should be given specific instruction in writing as to the exact dosage and method of administration. It is not fair to assume that the patient is already familiar with the procedure of even so commonplace a thing as a douche. When instructions are placed in writing this protects both patient and physician from the possibility of misunderstanding.

Not only should the proper dosage or procedure be prescribed but the dangers of exceeding this dosage should always be pointed out and symptoms of possible toxic action warned against. Some patients are peculiarly susceptible to the fallacy that if a little is

good, much is better. Thus a patient not knowing the toxic properties of digitalis might increase the dose, hoping to improve results, unless he knew the possible poisonous effect of the drug he was using. It is not uncommon for over zealous individuals with tuberculosis, when told to take sun baths, to abruptly begin on long exposures to sunlight with resulting increase in the toxicity of their condition.

Not only are written specific instructions to patients safe but they have a good psychological effect on the patient and they increase his respect for the thoroughness and ability of the physician. Even diets that are really adapted to the individual and not just printed copies distributed for stereotype cases are distinctly useful and practical. Let us add to our instruments of precision and scientifically compounded drugs, clear, accurate, concise, and written instructions to patients, not only as to the manner of usage of our medicines, but also the dangers from inaccurate or careless deviation from such instructions.

J. C. M.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.

ERADICATION OF MOSQUITOES

The mosquito season is here again, and in some communities the public may desire to have freedom from this pest. In considering the problem of eradication and control of mosquitoes, we must fully realize that we may have several kinds of mosquitoes in one locality, and that these different varieties may differ decidedly in customs of life and travel habits.

Along the seacoast, from Maine to Texas, we have a mosquito called "*Aedes sollicitans*" that breeds in brackish water, and which travels long distances voluntarily with light breezes. This species emerges in large numbers from time to time and becomes very annoying. Also, in recent years, with the development of oil fields and gas wells, inland sources of salt water under pressure have been released and the water has been brought

to the surface, and this former coastal mosquito has established itself in several inland localities where it formerly did not exist.

There are other species of *Aedes* that travel for considerable distances, which originate in temporary sheets of water and in pools in wooded areas, and may become nuisances of intermittent nature according to prevalence of rainfall periods. The control of these species is of importance to many communities, as their presence affects property values. The mosquito control work should be undertaken by the community, county or group of counties affected, as is now being done in New Jersey, Massachusetts, and some other states.

In villages, towns and cities we have local mosquito nuisance problems for which we ourselves are largely responsible. These local nuisances are caused by a mosquito known as the "*Culex*," and in the Southern States, also by another known as the "*Stegomyia*," which is closely associated with man but reproduces only in fairly clean water. Both of these mosquitoes reproduce in water containers which we allow to be so placed as to catch and hold rain water. The "*Culex*" also propagates in enormous quantities in dirty water and in collections of water heavily charged with house waste, or sewage. Slowly moving or stagnant water into which house sewers discharge produce many more "*Culex*" per unit of water surface area than clean water. Also, when extensive "*Culex*" breeding areas of this nature are produced by man, we find the "*Culex*" range sometimes as far as two miles from such a prolific source and follow us into our homes. Especially is this true where the effluent of a town septic-tank empties into a small stream near the edge of the town. Under this condition sometimes the water is black with mosquito larvae for a distance of two or three miles. It is well for us to keep in mind the fact that we are very frequently responsible for the prevalence of this kind of mosquito, because we allow water containers to be exposed to the rains, and allow polluted water to exist in and near our homes and communities, which conditions favor a rapid production of this pestiferous insect.

In large numbers of communities these conditions favorable to mosquito production make it essential to screen the homes, and in many instances the cost of screening is greatly in excess of the cost of removal or control of the breeding places of the "*Culex*" mosquito.

In order to bring about the reduction of the mosquito nuisance, many towns have adopted the standard mosquito ordinance, which makes it a misdemeanor for any property owner or tenant to allow mosquitoes to breed on his premises. Copies of this ordi-

nance may be obtained from your State Health Department or from the Public Health Service at Washington, D. C.—*United States Public Health Service.*

NEW MEMBERS FOR 1931

Boswell, Chas. W., Atlanta.
Bowcock, Chas. M., Atlanta.
Cochran, M. F., Newnan.
Duncan, G. A., Decatur.
Fort, Lynn, Atlanta.
Hallum, Alton, Atlanta.
Hammond, G. W., Newnan.
Kieffer, U. McLaws, Atlanta.
Kemp, R. C., Albany, N. Y.
McGehee, Henry, Atlanta.
Ridley, H. W., Atlanta.
Simonton, Fred H., LaFayette.
Teasley, Gerald, Atlanta.
Walton, Jno. M., Atlanta.
Winchester, M. E., Atlanta.

SIXTH DISTRICT MEETING

The regular summer meeting of the Sixth District Medical Society was held at Indian Springs, June 24, 1931. The morning session was in the Hoard Auditorium. Invocation by Rev. Jeff Davis. The Scientific Program was as follows:

1. Ectopic Gestation, Approaching Term—Case Reports, by Dr. W. W. Baxley. A thorough survey of the symptoms, diagnosis and treatment of ectopic pregnancy was given with two interesting case reports. In discussing this paper Dr. C. C. Harrold emphasized the characteristic symptoms. Doctor Ridley cited evidence of its comparative frequency. Dr. O. H. Weaver described the Aschheim-Zondek Test and its usefulness.

2. Health Work in the Schools—By Dr. C. L. Ridley. This paper stressed the prevalence of correctible defects, the need of health work, especially in the rural schools, and the economic value of such work. Discussion by Doctor Applewhite stressed importance of health education in schools. Doctor White, of Flovilla, discussed the legal status. Doctor Ridley, in closing, cited Metropolitan Life Insurance figures.

3. Esophageal Obstruction—By Dr. A. M. Phillips. Doctor Phillips limited his paper to that type of obstruction due to corrosives. He cited in detail two cases, in one of which the esophagus had been successfully dilated and the patient symptom free for several years. In the second case gastrostomy was necessary and dilation not yet accomplished. This subject was discussed by Dr. C. C. Harrold and Dr. O. H. Weaver.

4. Dangers of Delay in Duodenal Ulcer—By Dr. C. C. Harrold. Doctor Harrold emphasized these three dangers of temporizing too long with a definitely diagnosed duodenal ulcer: (1) Hemorrhage, (2) perforation, (3) chronic invalidism and neu-

raesthesia. Dr. T. E. Rogers, in discussing, mentioned the danger of further ulceration following operation and urged prolonged trial of diet and medical measures. Dr. O. H. Weaver advised trial of medical measures with resort to surgery if and when this proved unsuccessful. Doctor White, of Flovilla, agreed with Doctor Rogers and cited several cases.

5. Chronic Purulent Otitis Media—By Dr. J. Allen Smith. This paper emphasized the importance of the condition; the necessity of thorough study and accurate diagnosis, and outlined methods of treatment, including various degrees and types of mastoidectomy. Temporal bones were demonstrated, showing these different operations. Paper discussed by Doctor Arthur G. Fort, of Atlanta. He emphasized the non surgical methods, but stated that surgery was essential in some cases.

6. Diagnosis and Treatment of Cardiac Arrhythmia—By Dr. T. E. Rogers. Taking up each of the common arrhythmias separately Doctor Rogers discussed the underlying physiology, pathology, clinical aspects and treatment.

This concluded the scientific program. Luncheon was served in the dining room of the Hotel Foy.

During a brief business session the minutes of the last meeting were read and approved. Financial report was given and adopted.

Dr. W. H. Austin, of Griffin, moved that a committee be appointed to draw up resolutions relative to the death of Doctor Thrash of Atlanta. Doctor Austin was appointed a committee of one to draw up these resolutions.

Dr. Arthur Fort, President of the Medical Association of Georgia, was introduced by Doctor Weaver. Doctor Fort announced that Dr. K. S. Hunt, of Griffin, had been appointed councilor for the Sixth District, succeeding Dr. M. M. Head, now President-Elect of the Association. It was left with Doctor Hunt to appoint his Vice-Councilor. Doctor Fort next discussed the present status of pending medical legislation. He mentioned particularly anti-vivisection measures, proposed reorganization of the State Department of Health, and Modification of the Workman's Compensation Act so as to remove in some cases the \$100.00 liability limit. Doctor Fort also mentioned a new plan for Group Life Insurance through the Association; the need of Calhoun Lectureship for more endowment and lastly the status of the Medical History of Georgia, which he reported ready for publication, but lacking sufficient funds.

At the close of Doctor Fort's address the president announced that the next meeting was to be held in Griffin on December 2nd. The meeting was then adjourned.

H. C. ATKINSON, M. D.
Secretary-Treasurer.

Eighty-third annual session of the Medical Association of Georgia will be held in Savannah, May 10, 11, 12, 13, 1932. Roster of officers and committees is published on page 333.

CANCER* CHAPTER II

J. L. CAMPBELL,† M.D.
Atlanta

Cancer is an ancient and widely distributed disease. It occurs with equal frequency among the Eskimos of the frozen North, whose diet is almost exclusively meat, as among the primitive vegetarians of Asiatic countries. A peculiar feature, however, is that the higher a race ascends the scale of civilization and culture the more susceptible it becomes to this disease. "Cancer rarely occurs among savage people." (Hoffman). It was seldom seen among the negro slaves in the Southern cotton belt, but has shown a steady increase in the race since they were thrown upon their own resources at the close of the War Between the States. During the past nine years there were 766 cancers of various organs and parts of the body among 43,737 admissions to the Emory University (colored) division of Grady Hospital.

It is estimated that there are always more than 300,000 people in the United States who have some form of cancer; 100,000 of these die annually. It is difficult to account for the enormous increase in cancer, unless it is because of the increased length of human life. At the close of the 15th century the average life was only 21 years; at the present time it is 58 years.

Cancer may occur at any age, even before birth, but by far the greatest number are found in people past 35 years of age. One woman in every eight and one man in every ten dies of cancer after the age of forty years.

Our knowledge of cancer is steadily increasing, but we have not yet found the ultimate cause. This may be due to the fact that there is probably a different cause for every group or type, for all cancers are not the same. Any organ or any part of the body may be attacked by any one of several forms. Some types display a chronic, indifferent course, while others are active and spread rapidly to distant body structures. Our only chance of staying the ravages of this malady is by prompt action and honest cooperation of both the doctor and the patient. It has been proven that the likelihood of ultimate recovery decreases 10 per cent for each month of delay; therefore, a grave responsibility rests on the shoulders of the doctor who delays treatment when he is consulted by a

*This is the second of a series of seven articles on the cancer problem in its relation to public health written by Dr. J. L. Campbell at the request of the Georgia State Board of Health. Succeeding articles will be published in the Journal of the Medical Association of Georgia until the series has been completed.

†Chairman of the Cancer Commission of the Medical Association of Georgia.

patient having a suspicious lesion. People do not always take the advice given them and many physicians see so few cancers that they are often unable to recognize one in its early stages. In Georgia we have 3,000 physicians; among the people of Georgia there are about 6,000 who have some form of cancer or pre-cancer every year. This is an average of two cases per year per doctor. Therefore we must not criticize the average physician for being unable to recognize any and every cancer as soon as he sees it. On the other hand, our profession must endeavor by diligent study to become familiar with the early symptoms of this disease and with the susceptibility of the various organs and parts of the body to it that any variation from the normal will arouse suspicions and cause us to seek the aid of some one more experienced if we are not convinced that we are correct in our diagnosis. As I have said in a previous chapter, Georgia is fortunate in having a number of well trained men located at strategic points, so that any citizen of the state can avail himself of the best talent at a reasonable distance of his home.

We must endeavor to arouse such an interest in health and public welfare that people will not wait until they have crossed the dead line before consulting a doctor and take his advice. We must be so cognizant of our responsibility that we will be willing to confess our ignorance and seek help if we cannot be positive of the diagnosis.

CANCER* CHAPTER III

J. L. CAMPBELL,† M.D.
Atlanta

Dr. Robert Battey Greenough of Boston, Mass., Chairman of the American College of Surgeons' Committee for the Study of Malignant Diseases, in an editorial in the October issue of "Surgery, Gynecology and Obstetrics" said:

"The plan for the organization of cancer service and cancer clinics in general hospitals throughout the country . . . marks a definite step forward in providing more adequate service for cancer patients. This project has the support of the directors of the American Society for the Control of Cancer, as well as the Regents of the American College of Sur-

geons, and already special clinics of this nature are proving their value in the communities in which they have been put in operation. A wider development of these clinics . . . cannot fail to contribute greatly to the early diagnosis and the adequate treatment of cancer, with the resources now at hand, and thus aid in diminishing the unnecessarily high mortality of this disease."

Georgia is already well provided with men and means for treating cancer with the latest approved methods, and we are glad to note that this step is in keeping with the views of such eminent students of the subject as Dr. Greenough and his committee.

An erroneous belief has been developed that cancer is incurable. Many factors have contributed to this delusion. It seems that people cannot be convinced that a lump or sore (and cancer begins as a painless lump, or an ulcer, or a scaly spot on the skin) is dangerous unless it causes pain or is tender to the touch. When a cancer begins to give pain, it is generally too late. Procrastination has gone too far. Patients who have a suspicious condition must consult a doctor early, cooperate with him and follow his advice; a conscientious, well-trained doctor will not give advice unless he can substantiate it. Only when this plan is followed will the death rate from cancer be materially reduced.

Who among the people of Georgia, having typhoid fever, would wait for a hemorrhage to occur before sending for a doctor? In such a case a cure would not be expected. The majority of early cancers can be cured. Unfortunately, a patient who has been cured of cancer seldom tells the neighbors or friends. On the other hand, a death from cancer becomes public gossip.

Our Boards of Health have no such means of preventing cancer, as they have for contagious, infectious or epidemic diseases, for cancer is neither contagious, infectious nor hereditary. Bad blood has no influence on its development.

Cancer is an independent growth of body tissue. It may occur in any part of the body; but there are some parts much more susceptible than others. Certain varieties of cancer occur at almost stated periods of life; for instance, cancer of the bones and lymph glands are more frequent in children and young adults. Fortunately, these are rare. Other structures are attacked later in life.

Statistical research has taught us that cancer of some parts of the body can be prevented, while in others it cannot. But, when we know the early symptoms and are able to recognize a dangerous lesion while it is still local, the majority of them can be cured!

*This is the third of a series of seven articles on the cancer problem in its relation to public health written by Dr. J. L. Campbell at the request of the Georgia State Board of Health. Succeeding articles will be published in the Journal until the series has been completed.

†Chairman of the Cancer Commission of the Medical Association of Georgia.

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Headquarters

131 Forrest Avenue, N. E., Atlanta.

HAIL AND FAREWELL!

The twenty-fifth meeting of the Georgia State Nurses' Association will be held at the DeSoto Hotel in Savannah, Ga., October 26-28, inclusive.

Mrs. Agnes C. Hartridge, who was the first President of the organization, expects to be present and it is hoped that many former members will return to celebrate the Silver Jubilee Year in Savannah, where the organization was founded with forty-seven nurses as charter members. This year the organization has undertaken a membership campaign in cooperation with all of the other States in the American Nurses' Association.

The President of the American Nurses' Association, Miss Elnora Thomson, is now in Europe to attend an *ad interim* conference of the Board of Directors of the International Council of Nurses in Geneva, Switzerland.

The next quadrennial meeting of the International Council of Nurses will be held in Paris, France, and Brussels, Belgium, in 1933.

It will be a fine thing to greet Miss Thomson as she steps off the steamship in New York with the news that the goal has been exceeded, and that more than 101,000 nurses have joined or renewed membership in one of the greatest professional organizations of women in the world.

Georgia's quota in this campaign is 1,369, which was secured by a 25 per cent increase of the 1930 membership. Our present membership is 1,234.

The membership by Districts is as follows:

First District Headquarters, Savannah	217
Second District Headquarters, Thomasville	*
Fourth District Headquarters, Columbus	73
Fifth District Headquarters, Atlanta	554

Sixth District Headquarters, Macon	147
Seventh District Headquarters, Rome	54
Eighth District Headquarters, Athens	28
Ninth District Headquarters, Gainesville	22
Tenth District Headquarters, Augusta	135
Two Transferred to Fifth	2
One Seventh District	1
One Second District	1

Total.....1234

This means Georgia needs 138 more members. If members who are delinquent will pay 1931 dues at once we will reach our quota.

We need from the First District 28 members, from the Fifth 88, from the Sixth 2, from the Seventh 8, from the Ninth 3, and from the Tenth 9 to make the 138 necessary. Which District will be first to meet its quota? The Fourth and Eighth Districts have exceeded their goals.

During the month of June we sustained the loss of several Georgia nurses, much beloved and honored in their profession and out of it. Miss Louise Nisbet Hazlehurst, graduate of Telfair Hospital School of Nursing in May, 1907, died on June 2, 1931, at Middle Georgia Sanitarium, Macon, Ga. She was a past President of the Georgia State Nurses' Association, and a former Secretary and President of the Examining Board. She served at Camp Wheeler in the World War and later in the Southern Division of the American Red Cross Nursing Service. Her major contribution to nursing was in School Nursing of the Macon Schools. Miss Hazlehurst left an estate of about \$25,000, which she bequeathed to individuals and organizations, including the Business and Professional Women's Club of Macon and the Episcopal Church.

Mrs. Eugene B. Elder, formerly Margaret

*The Second District has just been organized and its members joined other districts and are being transferred.

Borthwick, was a charter member of the Georgia State Nurses' Association. For several years she was Superintendent of the Macon City Hospital Training School. She trained as a nurse at Guelph General Hospital, Guelph, Canada, graduating in 1907. Her husband, Dr. Eugene B. Elder, was formerly Superintendent of Georgia Baptist Hospital, and more recently Superintendent of Knoxville General Hospital, where Mrs. Elder died after a short illness, on June 14, 1931.

Miss Bessie Lee Harris passed away on May 28, 1931. She received her training at Wesley Memorial Hospital Training School, graduating from that institution in 1911, and was afterwards made a member of the staff. She was an active member of the Georgia State Nurses' Association and belonged to the Fifth District. During the war she served at Camp Travis, Texas, and at the Army hospitals in St. Louis, and at Plattsburg, N. Y. After the war was over she again resumed her duties at Wesley Memorial. She died after an illness of only a few days. Miss Harris was buried in Oakland Cemetery, Atlanta, with full military rites.

Miss Grace Plott died on June 27, 1931, as the result of being hit by an automobile while standing at the curb in front of the hospital where she was on duty. After two weeks' suffering she died of internal injuries. Miss Plott was a graduate of the Piedmont Sanitarium in the class of 1921. She was a member of the Fifth District of the Georgia State Nurses' Association.

Miss Lucy Ham passed away on December 30, 1930. She was a member of the First District of the Georgia State Nurses' Association and was a graduate of the Greenwood Hospital, Greenwood, S. C.

The passing of these beloved members impresses us with the uncertainty of life, and the greater need for each nurse to exert her efforts and influence in carrying on with high endeavor in the memory of those who have gone before.

STATE BOARD OF MEDICAL EXAMINERS OF GEORGIA

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Dr. C. F. Griffith, Griffin.

Dr. J. W. Palmer, Ailey.

A RESOLUTION CONCERNING A NEW PLAN OF BENEFITS TO VETERANS OF THE WORLD WAR

The following resolution was adopted by the House of Delegates of the American Medical Association at Philadelphia in June of this year:

"Whereas, The Federal Government has inaugurated the policy of rendering medical and hospital benefits to veterans of the World War with non-service connection disabilities; and

"Whereas, This policy was inaugurated over the opposition of the American Medical Association; and

"Whereas, The policy now in force, if carried to its logical conclusion, involves the construction, the staffing, and the maintenance of a sufficient number of hospitals to accommodate the hospital needs of all the veterans of the World War; and

"Whereas, Such a policy places the federal government in unnecessary and unjust competition with the civilian hospitals and the medical profession of the United States; and

"Whereas, The present policy is of unequal benefit to veterans by reason of the fact that many disabled veterans cannot (for one reason or another) avail themselves of the benefit; therefore be it,

"Resolved, That the House of Delegates of the American Medical Association petition the Congress of the United States and the American Legion to abandon the policy of rendering hospital and medical benefits to veterans of the World War with non-service connected disabilities and substitute therefore a plan of disability insurance benefits with the following provisions:

"First, the creation of a Bureau of Disability insurance in the Veterans' Bureaus as now constituted.

"Second, the issuance of a disability insurance policy to each veteran with disability benefit clauses as follows:

"(a) The payment of a weekly cash benefit during a period of total disability, and

"(b) The payment of liberal hospital benefit sufficient to cover the hospital expenses of a veteran during a period of hospitalization for any disability. Such benefits to be paid to a veteran on satisfactory proof of total disability, and

"Third, Such other provisions as are necessary for the proper administration of the act.

"Be it further,

"Resolved, That the proper officers of this Association be instructed to approach the officers of the American Legion with the view to securing the adoption of the policy above set out as a part of the legislative program of the American Legion, and be it further,

"Resolved, That each state medical association be requested to form a committee whose duty it will be to approach the state and local Legion posts throughout the country with a view to securing the adoption of this program by them."

MEETING OF THE CHATTAHOOCHEE VALLEY MEDICAL AND SURGICAL ASSOCIATION

The thirty-first annual meeting of the Chattahoochee Valley Medical and Surgical Association convened at Radium Springs, Ga., July 14th, attended by a large group of physicians from Georgia, Florida, and Alabama. The program was one of the finest ever presented by this unique Association, long noted for its purely scientific meetings. This session witnessed a departure from the custom of two days' meetings due to the insistence of essayists from various quarters that they be placed on this year's program. The officers and program committee were reluctant to extend the session into a third day, but were gratified to see a maintenance of interest up to the closing paper, which, by its excellence, amply repaid a sizable audience for their faithful attendance through the third-day session.

The program committee deserves the commendation of the Association for the well-balanced program presented. Such aspects of medicine as its medico-legal, social, and organizational features, as well as splendid symposiums on diseases of the heart, chest, etc., and choice papers running the gamut of pediatrics, internal medicine, surgery, and the various surgical specialties were ably presented by an array of talent drawn from three States. Papers were interestingly illustrated by lantern slides and cunningly devised cuts, x-ray films, etc. Special mention is in order with respect to a feature of Monday's program. We were privileged to hear, in order, Dr. A. G. Fort, President, Medical Association of Georgia; Dr. G. H. Edwards, President, Florida Medical Association, and Dr. M. Toulman Gaines, President, Alabama Medical Association. It was heartening indeed to hear the leaders of the great professions of Georgia, Florida, and Alabama, sounding the common call to renewed loyalty and devotion, on the part of doctors everywhere, to the great principles that have challenged and justified our labors through all the years. A tolerant spirit, Catholic in its outlook, but militant in behalf of original objectives, ethics, and the necessity of the preservation at all costs, of the personal relation of physician to patient in the practice of medicine, was the united theme of all these speakers. The setting was not unlike an old-fashioned camp meeting in its fervor, and many lusty "Amens" slipped unwittingly from the throats of the erstwhile dignified disciples of Aesculapius.

The meetings of this Association have long been characterized by a form of unvarnished

good-fellowship. Such an atmosphere was notably present at Radium Springs this year. Although the Constitution and By-Laws of the Association forbids imposing upon the hospitality of the physicians of the host city, the doctors of Albany were untiring in their efforts to lend a hand to our comfort and enjoyment. They co-operated nobly with the management of Radium Springs in providing facilities to carry through the scientific program, and sandwiched in several social features which "violated" the By-Laws. But Albany hospitality will not be denied.

The second day's program merged into a delightful dance given in the beautiful ball-rooms of the Radium Springs Club. Those of our members who had neglected to loosen fibrotic joints on Radium Springs' unequaled golf course were seen swaying with the many belles that complimented this occasion, with all the ease and grace that has made Bobby Jones the sports champion of the world.

The Board of Council held its annual meeting Wednesday night. Its deliberations resulted in the resolve to adopt Radium Springs as our regular meeting place and the election of the following officers for the ensuing year:

President, Dr. J. C. Davis, Quincy, Fla.

First Vice-President, Dr. Jerre Watson, Anniston, Ala.

Second Vice-President, Dr. J. R. McMichael, Quitman, Ga.

Secretary-Treasurer, Dr. W. J. Love, Opelika, Ala.

Chairman Program Committee, Dr. Marion T. Benson, Atlanta, Ga.

To succeed Dr. Hugh McCullough, of West Point, Ga., on the Board of Council (time expired), Dr. W. L. Cooke, Columbus, Ga.

The Chattahoochee Valley Medical and Surgical Association has a special appeal to a large group of doctors who have attended its sessions regularly in the past. They find in it a blending of scientific and clinical medicine presented so as to be assimilated and carried home. For these old friends and supporters the Association is always grateful. They are the soul of the organization. But the session just concluded at Radium Springs registered several new members whose presence added greatly to the scientific session as well as to its social features. To these, and their friends, a cordial welcome is extended to come again and to join the "stand-patters". They will find here no forbidden portals, or preferred circles closed to the representatives of legitimate medicine, though they hail from jurisdictions far removed from the rippling Chattahoochee. C. W. ROBERTS, M.D.

WOMAN'S AUXILIARY

MEDICAL ASSOCIATION OF GEORGIA

OFFICERS

President Mrs. Ralston Lattimore, Savannah
 President-Elect .. Mrs. S. T. R. Revell, Louisville
 1st Vice-President Mrs. J. Bonar White, Atlanta
 2nd Vice-President Mrs. C. B. Almand, Winder
 3rd Vice-Pres., Mrs. D. N. Thompson, Elberton

Recording Secy. Mrs. J. E. Penland, Waycross
 Cor. Secretary, Mrs. Wm. R. Dancy, Savannah
 Treasurer Mrs. Ben Bashinski, Macon
 Parliamentarian Mrs. Allen H. Bunce, Atlanta
 Editor..... Mrs. G. H. Johnson, Savannah

PRESIDENT'S COMMUNICATION TO THE THIRD DISTRICT*

To the Ladies of the Third District, of the
Woman's Auxiliary, *Greetings:*

I wish it were possible for me to be with you today, but as that cannot be, I am sending this written word to let you know that I am thinking of you. How I wish that each one of you could have been at the recent convention in Atlanta and seen, as I saw, and felt as I felt, the wonderful spirit of interest and enthusiasm that pervaded the meetings! I was told by Doctor Dancy that the attendance this year was the largest the Association has ever had, and that this is largely due to the influence exerted by the Auxiliary. My friends, what I want you to realize is the fact that *you are an integral part of th's body*, and that what you do in the way of keeping together, and pulling together means the life of the whole—just as every part of the human body is necessary for the well-being of the individual.

Then too, it is a privilege, accorded only to *doctors' wives*, to be a member of the Woman's Auxiliary. We feel that our husbands are doing the finest work a man can do, and we want to back him in this work to which he gives his life. We have more opportunities to keep informed on health matters than most people have, and we should be glad to be of service to the community in which we live. Do not let outside interests absorb your time to the exclusion of your part in the Auxiliary. The Auxiliary bands the doctors' wives together, promotes better acquaintance, educates them along the lines of health promotion and disease prevention, and by our interest stimulates our doctor-husbands.

When you ladies, who are present today, return to your various counties, do what you can to organize and hold meetings, even if your number be few, and your meetings not so often—better to meet a *few* times a year than not at all! Mrs. S. T. R. Revell, of Louisville, Ga., is the Chairman of Or-

ganization, and she stands ready to help you with your problems of organizing; also she can tell you where to get study programs, or health pamphlets suitable for your meetings.

Most of you know that our Auxiliary is helping some boys who are studying to be doctors. The money that we use for this purpose is sent by the various auxiliaries all over the state to Mrs. William Shearouse, of Savannah, who is the Chairman of the Students' Educational Fund. The auxiliaries raise this money in various ways, and their contributions are as large as they can make them.

Our treasurer, Mrs. Benj. Bashinski, of Macon, has asked me to remind you that the state dues are 75 cents per capita, that they should be accompanied by the *name of every paid member*, and be sent in by March 1st.

How Many of you know that in THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA, that comes to your husbands, there are two pages devoted to Auxiliary news? I want you to watch for this, and keep informed, and if your auxiliary has any special news of interest send it to me or to our State Editor, Mrs. Hugo Johnson, of Savannah.

In closing let me add that I am counting on you to do your part. As your President I am here to serve you to the best of my ability, and with God's help, and your co-operation, we shall endeavor to make this organization "bigger and better than ever".

MRS. RALSTON LATTIMORE.

GEORGIA MEDICAL SOCIETY AUXILIARY

The regular meeting of the Woman's Auxiliary to the Georgia Medical Society was held on June 5th at the home of Mrs. Julian Quattlebaum, 321 East 50th Street.

Mrs. Lee Howard, President, presided.

Miss Sara Johnston, a member of the Big Sister movement, gave an outline of the work of that organization in Savannah.

Mrs. Otto W. Schwalb was appointed by the president to prepare and send to Earl

*Read before the Third District meeting at Cuthbert on June 17, 1931.

Robinson, a patient at Alto, a birthday box as a gift of the Auxiliary.

Mrs. Wm. R. Dancy and Mrs. Chas. Usher, committee in charge of soliciting subscriptions to Hygia, reported sixteen new subscribers.

Plans were approved for the First District meeting to be held at Hotel DeSoto on July 29th.

Mrs. Geo. T. Olmstead, Mrs. Harry H. McGee, Jr., and Mrs. E. M. Baker, Jr., were appointed as an Arrangement Committee.

A report by Mrs. Hugo Johnson on the annual session, held in May in Atlanta, was read by the president.

Mrs. Wm. Shearouse reported the sales of stationery.

MRS. E. M. BAKER, JR.,
Recording Secretary.

HOW TO CORRECT DIARRHEA

After a starvation period of twelve to twenty-four hours on boiled water or gelatin water ($\frac{1}{2}$ oz. of gelatin to one pint of boiled water), the infant should be given Protein S. M. A. (Acidulated) diluted four level tablespoons with nine ounces of water, and without any additional carbohydrate.

	1st Day	2nd Day	3rd Day (*)
	Ozs.	Ozs.	Ozs.
Severe Cases	3	6	9
Medium Cases	10	15	20
Mild Cases	15	30	

(*) Until the proper amount for their age and condition is reached, which is 200 c.c. per kilo of body weight per twenty-four hours, or three ounces per pound of body weight per twenty-four hours. However, the total twenty-four hour intake need not go above thirty-two to thirty-five ozs. or 960 to 1050 c.c.

After forty-eight hours, or when the stools become normal, SMACO (400) Maltose and Dextrins (Spray Dried) should be added gradually, beginning with one ounce to the quart, and increasing until the infant is gaining steadily in weight. In certain cases, it may be necessary to increase the carbohydrate to a total of 12 to 15 per cent (three to four ounces of carbohydrate to the quart).

MULTIPLE MYELOMA AND DIABETES INSIPIDUS

MARK J. BACH, Milwaukee, and WILLIAM S. MIDDLETON, Madison, Wis. (*Journal A. M. A.*, Aug. 1, 1931), report an instance of the coincidence of gross pathologic changes in the bones and diabetes insipidus. Of particular significance were the possible changes in bony structures about the sella. Whatever the interrelationship between the bony lesions and the disturbance in water metabolism, a further example is added in the case of multiple myeloma with associated diabetes insipidus.

NEWS ITEMS

Dr. D. S. Reese and Dr. S. F. Scales, both of Carrollton, attended the summer clinics of the Cook County Hospital, Chicago.

Dr. C. K. Sharp, Arlington, has just returned from a visit with his son, Dr. C. M. Sharp, at Saranac Lake, N. Y.

Dr. W. G. Elliott, Cuthbert, took a post-graduate course at the New York Polyclinic Medical School and Hospital of New York City.

The Division of Tuberculosis Control of the State Board of Health, headquarters at Alto, announces a tentative schedule of clinics, to be held during August and September, as follows: Bartow county, August 24-25; Gordon county, August 27-28; Whitfield county, August 31-September 1; Murray county, September 3-4; Catoosa county, September 8-9; Dade county, September 11; Walker county, September 14-15; Chattooga county, September 17-18; Floyd county, September 21-22; Cobb county, September 24-25.

The Upson County Medical Society held a special meeting at Thomaston on June 23rd complimentary to Dr. B. G. Feen and Dr. Evelyn Girardeau, two recent medical graduates. Doctor Girardeau is the only woman affiliated with the society.

The Troup County Medical Society met at West Point on June 25th.

The American Dental Association, 212 East Superior Street, Chicago, in a recent communication advises that Dr. G. F. McCleary, Deputy Senior Medical Officer, Whitehall, London, England, will be available for speaking engagements, to medical and dental organizations, in the United States from October 15th to November 15th. Doctor McCleary says: "The sort of address I have in mind is not a mere description of health insurance in Europe, but a more general talk on the future condition of medical practice." There will be no charges other than actual daily and traveling expenses.

Dr. R. W. Richardson, formerly of Macon, has removed to New Orleans and associated on the staff of the Eye, Ear, Nose and Throat Hospital at Elk Place and Tulane Avenue.

Dr. H. L. Barrow, formerly of Macon, has moved to Powersville and will continue the practice of medicine at the latter location.

The Spalding County Medical Society met at the Strickland Memorial Hospital, Griffin, on July 7th.

The Chattahoochee Valley Medical and Surgical Association held its thirty-first annual session at Radium Springs, Albany, July 14-15-16. The fol-

lowing titles by physicians in Georgia were on the program: "Marasmus," Dr. J. C. Brim, Albany; "Undercurrents of Medicine," Dr. M. A. Ehrlich, Bainbridge; "Congenital Heart Disease," Dr. L. Minor Blackford, Atlanta; "The Importance of the Electrocardiograph in the Diagnosis, Prognosis, and Treatment of Heart Disease," Dr. T. E. Rogers, Macon; "Cardiac Stimulation," Dr. Hal M. Davison, Atlanta; Address by Dr. Arthur G. Fort, Atlanta, President of the Medical Association of Georgia; "Chest Clinic," Dr. Allen H. Bunce, Atlanta, and Dr. J. A. Redfearn, Albany; "Some Newer Aspects of Gallbladder Surgery," Dr. William M. Myers, Savannah; "Selection, Preparation, and After-Care of Thyroid Surgical Cases," Dr. C. H. Richardson, Jr., Macon; "Esophagoscopy and Bronchoscopy,—Illustrated with Motion Pictures," Dr. Murdock Euen, Atlanta; "Cinophen Hepatitis," Dr. W. W. Chrisman, Macon; "A Discussion of Skin Diseases Commonly Seen in Children—Illustrated with Natural Color Lantern Slide Photographs," Dr. Lee Bivings, Atlanta; "A Review of Traumatic Surgery: When, How and What to Do—Illustrated with Motion Pictures," Dr. J. M. Barnett, Albany; "Functional Gait Disturbances in Children—Illustrated with Motion Pictures," Dr. W. W. Young, Atlanta, and Dr. J. H. Kite, Decatur; "Rupture of the Kidney with Report of Ten Cases—Illustrated with Lantern Slides," Dr. Earl Floyd and Dr. J. L. Pittman, Atlanta; "Foreign Protein in the Palliative Treatment of Inoperable Cancer," Dr. Frank K. Boland, Atlanta; "Fusion Operations in the Treatment of Low Back Pains," Dr. Lawson Thornton, Atlanta; "Duodenal Ulcer," Dr. Julian K. Quattlebaum, Savannah; "Familial Achylia Gastrica," Dr. Ernest F. Wahl, Thomasville; "A Study of the Trachoma Situation," Dr. B. H. Minchew, Waycross; "Orbital Tumors," Dr. Grady Clay, Atlanta; "Three Unusual Cases of Appendicitis," Dr. G. Y. Massenburg, Macon; "The Treatment of Pneumonia," Dr. C. W. Strickler, Atlanta; "Surgery of the Sympathetic Nervous System," Dr. Chas. E. Dowman and Dr. Edgar F. Fincher, Jr., Atlanta; "Bone Tumors," Dr. Chas. C. Harrold, Macon; "A Brief Review of Twenty Years' Work in Eye, Ear, Nose and Throat," Dr. G. D. Ayer, Atlanta; "Sinusitis in Children," Dr. Francis B. Blackmar, Columbus; "Intestinal Toxemia," Dr. Trimble C. Johnson, Atlanta; "Esophageal Fistula Following Thoractomy for Empyema," Dr. C. K. Wall, Thomasville; "Aschheim-Zondek Test as an Aid in Differential Early Pregnancy from Other Pelvic Conditions," Dr. B. T. Beasley, Atlanta; "Spinal Anesthesia," Dr. A. F. Saunders, Valdosta; "Spontaneous Pneumothorax," Dr. F. K. Neill, Albany; "Surgical Diseases of the Spleen," Dr. Henry Poer, Atlanta; "Therapeutic Use of X-rays in Private Practice," Dr. Jas. J. Clark, Atlanta. Other doctors on the program to lead the discussion on the varied subjects were: Dr. M. A. Fort, Bainbridge; Dr. S. P. Kenyon, Dawson; Dr. G. Y. Moore, Cuthbert; Dr. N. M. Owensby, Atlanta; Dr. C. C. Aven, Atlanta; Dr. W. F. Jenkins, Columbus; Dr. J. W. Landham, Atlanta; Dr. R. S. Leadingham, Atlanta; Dr. Guy

G. Lunsford, Millen; Dr. E. E. Murphey, Augusta; Dr. R. T. Dorsey, Atlanta; Dr. H. G. Carter, Atlanta; Dr. C. H. Willis, Barnesville; Dr. T. C. Davison, Atlanta; Dr. W. A. Selman, Atlanta; Dr. W. L. Cooke, Columbus; Dr. W. N. Adkins, Atlanta; Dr. Mercer Blanchard, Columbus; Dr. I. W. Irvin, Albany; Dr. Jack Jones, Atlanta; Dr. H. S. Alden, Atlanta; Dr. Wm. A. Mulherin, Augusta; Dr. W. W. Anderson, Atlanta; Dr. Joseph Yampolsky, Atlanta; Dr. Jas. E. Paullin, Atlanta; Dr. T. L. Byrd, Atlanta; Dr. Guy Dilliard, Columbus; Dr. L. G. Baggett, Atlanta; Dr. J. A. Thrash, Columbus; Dr. J. E. Walker, Albany; Dr. J. M. Sigman, Macon; Dr. Cosby Swanson, Atlanta; Dr. J. M. Barnett, Albany; Dr. T. P. Goodwyn, Atlanta; Dr. Theodore Toepel, Atlanta; Dr. A. F. Caldwell, Atlanta; Dr. W. L. Champion, Atlanta; Dr. M. T. Benson, Atlanta; Dr. Gordon Chason, Bainbridge; Dr. Dan C. Elkin, Atlanta; Dr. A. H. Hilsman, Albany; Dr. F. G. Hodgson, Atlanta; Dr. B. T. Wise, Americus; Dr. A. G. Little, Valdosta; Dr. H. C. Sauls, Atlanta; Dr. Geo. F. Klugh, Atlanta; Dr. Hugh Lokey, Atlanta; Dr. Leon E. Brawner, Atlanta; Dr. J. H. Crawford, Atlanta; Dr. A. S. Bacon, Albany; Dr. Edward H. Greene, Atlanta; Dr. Chas. E. Waits, Atlanta; Dr. Marion C. Pruitt, Atlanta; Dr. Beecher DuVall, Atlanta; Dr. Frank Bird, Valdosta; Dr. E. B. Anderson, Americus; Dr. A. J. Whelchel, Cordele; Dr. J. M. Poer, West Point; Dr. Jas. N. Brawner, Atlanta; Dr. W. W. Young, Atlanta; Dr. Michael Hoke, Atlanta; Dr. F. B. Blackmar, Columbus; Dr. H. J. Bickerstaff, Columbus; Dr. Hugh McCulloh, West Point; Dr. B. McH. Cline, Atlanta; Dr. T. H. Hall, Macon; Dr. J. A. Smith, Lyerly; Dr. R. H. Oppenheimer, Emory University; Dr. Lon W. Grove, Atlanta; Dr. Olin S. Cofer, Atlanta; Dr. Geo. W. Fuller, Atlanta; Dr. Wm. H. Myers, Savannah. The following officers were elected for the ensuing year: Dr. J. C. Davis, Quincy, Fla., President; Dr. Jerre Watson, Anniston, Ala., Vice-President; Dr. J. R. McMichael, Quitman, Ga., Second Vice-President; Dr. W. J. Love, Opelika, Ala., Secretary-Treasurer. Councilors: Dr. Gilbert Douglas, Birmingham, Ala., Chairman; Dr. Frank K. Boland, Atlanta, Ga.; Dr. Chas. H. Richardson, Jr., Macon, Ga.; Dr. Henry Green, Dothan, Ala.; Dr. W. L. Cooke, Columbus, Georgia.

The Harbin Hospital, Rome, has just issued its Eleventh Biennial Report. The institution was established in 1908 and approved by the American College of Surgeons in 1921. The report gives the names of the Attending Staff and Associate Staff, together with surgical statistics. The statistics include the treatment of cancer and surgical operations of the abdomen, head, neck, chest, rectum, female genitals, male genitals, upper extremities, lower extremities, and 694 miscellaneous surgical operations.

The Jackson County Medical Society met at the Harrison Hotel, Jefferson, on July 6th. Dr. A. A. Rogers, Commerce, read a paper entitled, "The Injec-

tion Treatment of Varicose Veins". The next meeting of the society will be held on September 7th.

The First District Medical Society met at Savannah on July 29th. The following titles were on the scientific program: "Appendicitis with Apologies for its Morbidity and Mortality," Dr. Cleveland Thompson, Millen; "Dangers of Delay in Treatment of Duodenal Ulcers," Dr. Chas. C. Harrold, Macon; "The Relation of Neurology to the General Fields of Medicine and Surgery," Dr. Ralph Green, Jacksonville, Fla.; "Ununited Fractures—Lantern Slides," Dr. Willis Campbell, Memphis, Tenn.; "Bronchial Asthma," Dr. G. M. Mood, Charleston, S. C.; "Some Problems in the Differential Diagnosis of Abdominal Conditions," Dr. Allen H. Bunce, Atlanta; "Laboratory Aspects of Spotted Fever," Dr. L. F. Badger, U. S. P. H. S., Washington; "Renal Bleeding—Lantern Slides," Dr. Wallace Bazemore, Macon; "Some General Considerations in Treating the Accessory Sinuses of the Nose," Dr. G. H. Lang, Savannah. Dr. Arthur G. Fort, Atlanta, President of the Association, delivered an address on Legislation, Medical History, and the Abner Wellborn Calhoun Lectureship Fund.

The Polk County Medical Society met at the Wayside Inn, Rockmart, on July 24th.

Dr. Lon Grove announces the association with him of Dr. Joseph C. Read in the practice of Surgery. Office 610 Medical Arts Building, Atlanta.

Dr. J. M. Smith and Dr. F. H. Thomas, both of Valdosta, entertained the members of the Lowndes County Medical Society at a fish dinner, White Water Club, on July 18th. A number of scientific papers were read and discussed.

Dr. Chas. H. Richardson, Jr., Macon, is spending the summer at his home on the beach while convalescing from a recent major operation. His friends are pleased with his rapid and remarkable recovery.

DR. ELMORE CALLAWAY THRASH RESOLUTION BY THE FULTON COUNTY MEDICAL SOCIETY

Dr. Elmore Callaway Thrash died at Boulder Crest, Atlanta, Ga., on June 22, 1931, in his sixty-fifth year. Although the end came suddenly it was not unexpected, as six months before, he had developed a partial occlusion of the coronary artery. In spite of his failing health during the past six months he had carried on as usual in his unselfish devotion to his duties as practitioner and maintained to the end his interest in the professional and personal activities of his numerous friends. As an evidence of his devotion to duty and of his loyalty to his friends, shortly before his death he attended the recent meeting of the American Medical Association as a member of the House of Delegates in order to serve as the representative of the medical profession of Georgia and to aid in the election of his friend, Dr. E. H. Cary, of Dallas, Texas,

as President-Elect of this association. This trip was made against all medical advice. On his return he was confined to his home up to the time of his death.

Doctor Thrash was born in Meriwether County, Georgia, on February 20, 1867. He received his early education in the schools of his county and at Gordon Institute, Barnesville, Ga. After teaching for several years he entered the University of Louisville School of Medicine, from which institution he was graduated with honors in 1891. After graduation he returned to his home county where for thirteen years he practiced in Gay. During these years, in spite of a large general practice, he continued to improve himself along scientific lines by burning the midnight oil. His studies encompassed the broad subject of medicine, but he became particularly interested in bacteriology, pathology, and preventive medicine. It was during this period of his life that he conceived the idea of the necessity of a concerted effort on the part of physicians and laymen toward the establishment of a State Department of Health. With this in mind he wrote a paper on the subject. This article attracted such widespread attention that it was published in pamphlet form by the State Legislature and distributed among the voters of the state. The result was the establishment of our present very efficient State Board of Health.

It was during these years that Dr. Thrash managed to leave his practice for a period of time in order to do post-graduate work in pathology and bacteriology in Chicago. He thus laid the foundation for the splendid work which he did along these lines after coming to Atlanta.

On January 3, 1893, Doctor Thrash married Miss Lucy Crouch, of Gay, Ga. Mrs. Thrash was not only a devoted wife, but during the many years of his country practice she rendered valuable assistance—giving anesthetics, assisting in emergency operations, and in many other ways helping to lighten the burdens which fall on the shoulders of a country doctor. He is survived by Mrs. Thrash, his daughter, Mrs. Harry Dobbs, and a granddaughter, Betty Booker.

He moved to Atlanta in 1904 and became a member of the Fulton County Medical Society immediately thereafter. When the Atlanta School of Medicine was organized in 1905 Doctor Thrash was elected Professor of Pathology and Bacteriology, and served in this capacity until 1914 when this institution was merged with the Atlanta College of Physicians and Surgeons. In addition to his interest in pathology and bacteriology Doctor Thrash perfected himself in the diagnosis and treatment of diseases of the chest. It was on account of his proficiency along this line that he was elected Professor of Diseases of the Chest in the Atlanta Medical College in 1914. He served in this capacity until 1917, when this institution became the Medical Department of Emory University.

Doctor Thrash always took a leading part in the various activities of the Fulton County Medical Society and the Medical Association of Georgia. He has served faithfully on many committees of these organizations. He was President of the Fulton County Medical Society in 1919, and President of

the Medical Association of Georgia in 1921. He has served as Councilor of the State Association, representing the Fifth District for many years. At the time of his death he was Chairman of the Publication Committee and the Committee on Medical History of the State Association. For the past five years he has been a Delegate from the State Association to the American Medical Association, and served as Chairman of the Reference Committee on Amendments to the Constitution and By-Laws.

In addition to his membership in the Fulton County, the Georgia State, and the American Medical Associations, Doctor Thrash was a Fellow of the American College of Physicians, a Fellow of the Radiological Society of North America, a member of the Southern Medical Association, a member of the Phi Chi Medical Fraternity, a Mason, a member of the Mystic Shrine, and a member of the Ponce de Leon Baptist Church. He was one of the chief physicians of the Grady Hospital for many years, and was attending physician to the Georgia Baptist, the Crawford W. Long Memorial, and the Piedmont Hospitals.

He was outstanding in tuberculosis work in Georgia. He was the first President of the Georgia Tuberculosis Association, and at one time Chief of the Staff of the Atlanta Tuberculosis Association. When the Masons of the state raised funds for a children's ward at Alto, Ga., Doctor Thrash was Chairman of the committee.

Doctor Thrash practiced medicine with proficiency and skill and contributed many original ideas and procedures to the art and science of medicine. He was a recognized authority as a medical consultant, and was familiar not only with the thought and procedure of yesterday, but was thoroughly conversant with the ideas and practice of the present. He was ever ready to accept new methods, provided his experience indicated the need of such innovations. He was one of the pioneer workers in this section in the field of radiology, and at the time of his death was in charge of the deep roentgen ray department of the Piedmont Hospital. In addition to his varied medical activities he always delighted in entertaining his friends and colleagues. He was richly endowed. His robust constitution permitted long hours of labor with little rest. He was gifted with a brilliant mind and his faculty for clear and constructive thought made him the great physician that he was. He had great originality, tenacity of purpose, dogged perseverance and independence of thought—qualities which resulted in the many attainments for which he was widely known. He never failed in the defense of a friend, and if need be he would stand alone, for his knowledge of the human frailties gave him that magnanimity of spirit that knows no creed. In addition to his broad knowledge of medicine he was a student of the classics and an expert horticulturist and entomologist. Above all, however, he was a staunch friend, particularly of the young doctor.

Whereas, the Fulton County Medical Society has lost a loyal and devoted member, and

Whereas, so many of the members of this Society who knew and loved Doctor Thrash, are overcome with grief that he should be taken from among our midst, so full of usefulness and so rich in good cheer which he dispensed to all around him.

BE IT RESOLVED, That we spread upon our minutes this only too brief account of his career, that we join with his wife and his family in our common sorrow, extending to them our sincere and heartfelt sympathy in their great loss, and that a copy of these Resolutions be sent by the Secretary of this Society to his wife, and that they be published in the Bulletin of the Society, and in the Journal of the Medical Association of Georgia.

JAS. N. BRAWNER, M. D., *Chairman.*

LEON E. BRAWNER, M. D.

CHAS. E. DOWMAN, M. D.

PROTEIN MILK INDISPENSABLE IN SUMMER DIARRHEA CASES

A new protein milk, in sterilized liquid form, that is especially recommended for cases of summer diarrhea, is now available to physicians. It is probably one of the most convenient milk products ever offered to physicians as it is in concentrated liquid form and hermetically sealed in small six ounce cans. It never gets rancid and keeps in any climate. Since it is sterile, boiling is unnecessary.

This useful new product is identified by the trade name SMACO product number 201 Liquid Protein Milk and is prepared by the Research Division of S. M. A. Corporation. Many physicians refer to this product as Casein Milk, Eiweiss Milch or Finkelstein formula.

THE SUMMER-TIME USE OF VIOSTEROL

During the hot weather, when fat tolerance is lowest, many physicians have found it a successful practice to transfer cod liver oil patients to Mead's Viosterol in Oil 250 D.

Due to its negligible oil content and its small dosage, Mead's Viosterol in Oil 250 D does not upset the digestion, so that even the most squeamish patient can "stomach" it without protest.

There are at least two facts that strongly indicate the reasonableness of the above suggestion: (1) In prematures, to whom cod liver oil cannot be given in sufficient dosage without serious digestive upset, it is an incontrovertible fact that Viosterol in Oil 250 D is the antiricketic agent of choice. (2) In Florida, Arizona and New Mexico, where an unusually high percentage of sunshine prevails at all seasons, Mead's Viosterol in Oil 250 D continues increasingly in demand, as physicians realize that sunshine alone does not always prevent or cure rickets.

Mead Johnson & Company, Evansville, Ind., invite you to send for samples of Mead's Viosterol in Oil 250 D for clinical use during the summer months to replace cod liver oil.

OFFICERS AND COMMITTEES OF THE ASSOCIATION

1931-1932

NEXT ANNUAL SESSION, SAVANNAH, MAY 10-11-12-13, 1932

OFFICERS

President—Arthur G. Fort, Atlanta.
 President-Elect—Marvin M. Head, Zebulon.
 First Vice-President—Marion C. Pruitt, Atlanta.
 Second Vice-President—H. M. Tolleson, Habira.
 Secretary-Treasurer—Allen H. Bunce, Atlanta.
 Parliamentarian—M. A. Clark, Macon.

DELEGATES TO THE A. M. A.

Wm. H. Myers, Savannah (1931-2).
 Alternate, Wm. A. Mulherin, Augusta.
 C. W. Roberts, Atlanta (1931-2).
 Alternate, B. T. Wise, Americus.
 O. H. Weaver, Macon (1932-3).
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GEORGIA WARM SPRINGS FOUNDATION

As the faithful Moslem turns his face towards Mecca, so an ever increasing number of persons with poliomyelitis are turning theirs to Warm Springs, for it is here that they are not only benefited in body but in mind. Perhaps the first thing that strikes the newcomer is the spirit of the place; informality, cheerfulness, and helpfulness are the watch words of the Foundation.

At home the patient with poliomyelitis is watched over, pitied and spoiled by being waited upon while only too often neglected in other ways. Here the process is reversed and the individual taught and encouraged to look after himself as far as is possible. So those who have been unable to dress themselves or do other things soon find that they are in a measure independent and this spirit of independence is largely responsible for the immense change in the psychic make-up of many who come here. Almost everyone feels that there are others worse off who are doing something in life and succeeding and so hope enters where despair had dwelt. As the blind man once said, it is all right for people to see, but there is no reason for them to make a fetish of it. So the poliomyelitic learns that while it is all right to be an A. B. (able bodied) there are many indeed who are far more handicapped than by a few muscles which will not function properly and that a pleasant and profitable life is far less dependent on them than it was thought.

Apart from the mental aspects of the care and education of those who have had poliomyelitis, the chief feature of the Warm Springs Foundation is the training and re-education of muscles—chiefly by exercise in water by skilled physiotherapists and by walking exercises, carried out regularly and under supervision.

Although Archimedes, of Syracuse, many centuries ago, demonstrated that the body weighs as much less in water as the amount of fluid it displaces, this apparently was not taken into account in the treatment of poliomyelitis until the experience at Warm Springs. Here, under Dr. LeRoy Hubbard, it has been developed to a high point of perfection and the work serves as a model for other clinics and institutions, but there are at present no other institutions so liberally supplied by nature with such large quantities of water of exactly the right temperature. The advantage of this form of exercise is that muscles, far too weak to function in the air, may yet move the extremity when immersed in water. It is impossible to insist too much on the element of having this work done by those who know just what they are doing, so that neither too much or too little is done. If too much, the muscle and the patient may easily be exhausted, and if too little, the progress is not as rapid as it should be. Warm Springs has an adequate number of well trained physiotherapists.

Another advantage of the pool, in connection with the treatment, is that the patient can learn to swim and it is remarkable how well most of the patients can swim. The poet, Byron, it will be remembered, had a deformity of his feet, dating from his first year, which probably was due to poliomyelitis, and he found

that it was no handicap in the water and he excelled at water sports and swam the Hellespont, a feat accomplished by Leander in quest of his lady love many centuries before. Swimming and various aquatic sports, which are much in vogue at Warm Springs, are invaluable in developing co-ordination and also in strengthening the muscles. Another thing of paramount importance is that patients who cannot stand or walk ordinarily can stand and walk in the water, and this not only inspires confidence, but strengthens the muscles so that when there is sufficient muscle power eventually the same things can be done on land. By walking in water of different depths more and more weight can be carried as muscular strength returns.

To sum up, Warm Springs as a unique institution, offers unsurpassed opportunities for the development and training of muscular power, of utilizing what may be left even though no effort in this direction has been made for many years. The morale of the sufferer is strengthened and he learns to act and think like everyone else. The life is that of the ordinary resort type where there are hotel and cottage facilities. Those there are not looked upon as sick people and everything is done to make the individual realize that the loss of power is not an unsurmountable handicap.

JOHN RUHRAH, M. D.

NOTE: Dr. John Ruhrah became ill of infantile paralysis in September, 1930, at Naples, Italy. He came to Warm Springs as a patient in April of this year. Doctor Ruhrah is past President of the American Pediatric Society.

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COMMON ERRORS IN THE TREATMENT OF HEART DISEASE*

JAMES B. HERRICK,† M.D.
Chicago

When I was asked to deliver the Calhoun Lecture I was advised, almost ordered, to "cut out the high-brow stuff". This injunction, so flattering in its implied inference that I was the possessor of an oversupply of this choice article, was quite unnecessary. I had no intention of presenting high-brow stuff to an audience made up so largely of general practitioners. The ultrascientific paper is generally better read in the quiet of the study than listened to in the large audience room. So, what I am hoping to do is to offer something practical that may prove useful to the doctor who in the city or country, in the hospital or the group clinic, in the office or the home is trying to help those who suffer from disease of the heart.

When the preacher, teacher, or commencement orator speaks to you of mistakes he seldom means his own mistakes or yours. He adroitly stresses the mistakes of the other fellow, the third person. May I suggest that today instead of nudging each other and pointing to our neighbor as the offender we honestly admit that we have all been guilty—you and I as well as the other fellow. For a time let us drop distinction of first, second, and third person and speak collectively in the first person plural. "We all," as you say in the South, have been guilty of the mistakes enumerated. "There is no man that sinneth not." (I Kings, VIII, 46.)

I have eleven points to present. Do not be dismayed. They are not as many as the famous fourteen points of some thirteen years ago. Besides, most of them are brief. I hope

the eleven may have better luck in being put over than did the well-deserving but ill-fated fourteen.

1. We frequently err in our manner of telling the patient he has heart disease.

Every high-minded doctor expects to tell the truth. His moral sense revolts against falsehood. Moreover, he soon learns that truth-telling pays. Perhaps he can say with the Scotchman: "I know honesty is the best policy; I hae tried baeth." But truth is not alone what is said in words. Truth is rather the effect of what we say; it is what gets over to the listener. Emerson has well said: "It is not the fact that imports, but the effect of the impression of the fact on the mind." If I say to a patient, "You have a disease of the heart," I may have spoken a truth. However, to that patient heart disease may mean a fatal illness. Then unless the illness is of this serious nature, my statement of a fact, "You have heart disease," is in its effect a falsehood, for it has conveyed an entirely wrong impression.

We too often forget that the laity have a greater dread of heart disease than of any other disease except cancer and perhaps syphilis. To the average layman heart disease means inevitable progress toward an early and sudden death or toward a death deferred but with the long-drawn-out agony that comes from dropsy and suffocation. This is what my honestly intended but tactless statement has meant to the patient. In order to make my real meaning clear, I must interpret my words. I must make the patient get a proper conception of the nature of the illness, its gravity, its future and the management that will insure the best results. To do this I must be something of a judge of human nature, perhaps one might call it a practical psychologist. I may have to order the ignorant individual to do so and so, offering no reasons except that I say so and so. The intelligent man may need an explanation that is

*Address before the Medical Association of Georgia, Atlanta, Ga., May 13, 1931.

†Professor Emeritus of Medicine, Rush Medical College (University of Chicago), Chicago. Invited guest of the Abner Wellborn Calhoun Lectureship Committee.

painstaking and detailed. The important point is to make oneself clear, to speak a language that is intelligible to the listener. Some years ago a man of 65 came to me worried over the report of a bureau of analysis that there were a few casts and a trace of albumen in his urine. In spite of my repeated assurances that even with these findings he was in good health for one of his age he kept returning for re-examination and advice. One day I said to him: "You have a good many gray hairs; why don't you worry about them?" "Why, doctor, those are nothing but an evidence of my age; am I not entitled to have gray hair at 65?" "You are," I replied, "and so you are to have a trace of albumen; that's what your albumen and casts mean, just age. Your trouble is simply gray hairs in the kidney." I saw him no more for two years. Then he reappeared. He told me he had been to another physician who had at once recognized that he had Bright's disease. "And doctor, when this other physician asked me what your diagnosis had been and I told him gray hairs in the kidney, he was indignant and furious; he said he never heard of such a fool diagnosis in his life; he had always supposed Doctor Herrick, etc."

This experience taught me that in discussing medical matters with patients one must be careful not to use figurative language to one who is literally and not figuratively minded.

How easy it is to sow the seed of fear of heart disease! The doctor may do it by a shrug of the shoulder or by an air of ponderous uncertainty as he examines the heart. His comments on slight irregularities, faint murmurs or other alterations of tone, or on trifling changes in the size of the heart must be made with extreme caution; otherwise an impressionable child may be made more self-conscious or a nervous mother more apprehensive and overcareful. Many phobias start in this manner, many neurotic individuals are made more neurotic, and some have not only their happiness lessened, but their activities greatly curtailed because of fear that harm will come to a supposedly weak heart by even slight exertion.

It is plain that much tact is necessary so as not to occasion undue apprehension when

no grave condition is present. It requires still more skillful technic to tell a patient that his illness is serious and yet not upset his mental and physical equilibrium. To be at once sympathetic yet firm, to give needed orders that are explicit yet not alarming, at times requires an ability akin to genius. Yet there are proper ways of telling a patient he has even angina pectoris.

In a meeting of a State medical society in 1922, a well-known physician from a large city is reported to have said concerning angina pectoris: "My own method for years has been to tell these patients plainly that they may die suddenly, to make their wills, and have no further responsibility requiring anything of that kind, so that no unusual loss will fall upon their families." Another physician, likewise from a large city, in a State medical meeting in 1919, said: "I make a practice of telling my patients frankly, lying cheerfully, that they are going to get better, minimizing the gravity of the disease."

I do not believe either one of these men talks to his patients exactly as he is reported. If he does he is practicing poor technic. He is conveying wrong impressions. In the one case the doctor gives an impression of hopelessness, with death certain in the near future. In spite of the gravity of angina pectoris the prognosis is by no means as bad as this. The depressing effect on the patient may be harmful. In the other case there is held out an unwarranted hope. If the patient lives for months or years, as he may, but does not get better, as he was promised, he realizes that deception was practiced, loses confidence in his physician, in all physicians perhaps, and is made mentally if not bodily worse.

The first error, then, is one of technic. It concerns the art of medicine rather than the science. It has more to do with the treatment of the patient than of the disease. Some seem gifted by nature with the knack of understanding and handling people. Some are always blunderers. Yet there is no one who cannot improve his methods of practice in this respect. Each must do it in his own manner. The real way to avoid this error is to think of it.

2-3. The treatment of what is not heart

disease as though it were heart disease; the treatment of mild heart disease as serious.

These are faults of knowledge rather than of technic. They are really errors in diagnosis. Symptoms referred to the heart are interpreted as meaning heart disease when they really mean something else; or symptoms and findings that are trivial are given undue importance. These are not uncommon errors and they are often fraught with disquieting consequences.

Ignorance is a fruitful cause of these faulty diagnoses. The rapid heart may be natural to the patient or it may depend on an overactive thyroid gland or be the result of a phobia. The precordial pain may not be cardiac at all, may have its origin in the pleura, the stomach or the vertebral or costochondral articulations. It may be largely imitative in a neurotic who has lately seen anginal suffering in the family. The dyspnoea may be caused by anemia. The irregular rhythm may be respiratory in origin, may be physiologic and mean nothing wrong—the so-called sinus arrhythmia.

More careful examination may show that the heart is not as large as it was thought to be. The x-ray film may have been misinterpreted or the electrocardiogram. And then the murmur! This is not the place to repeat that a mere systolic murmur at the apex does not necessarily mean organic disease. Its interpretation, as has been so often said and so repeatedly forgotten, depends on such things as a preceding rheumatic history, on dyspnoea, size of heart, altered second tones, etc. That much unnecessary restriction of activity has been wrongly enjoined because of insignificant murmurs is attested by the records of every hospital or consulting physician who sees any large number of cardiac patients.

May I at this point interject a word concerning the manner of examining patients? Valuable as instruments are in diagnosis they should be viewed as auxiliary. History and physical examination still remain the foundation of diagnosis. Incidentally it may be added that their use retains the personal touch that means so much in diagnosis and treatment. How the patient behaves during the examination — tremors, flushing of skin,

sweating, pulse rate, mental attitude—may have fully as much to do with the conclusions reached as the physical findings themselves. How a patient tells a story is often of more importance than what he tells.

Ignorance, then, is a fruitful cause of this mistake. Haste or carelessness another. But these mistakes are often due to the doctor's dread of passing up an organic disease as negligible. He has the altogether praiseworthy desire to do the right thing by his patient and to do it now before it is too late. He has been told and knows it to be true that the best treatment for a damaged heart valve or muscle is to guard against overexertion and excesses and in this way postpone the evil day of cardiac breakdown.

More reading about heart disease or, rather, more study of what one reads and more thorough and thoughtful scrutiny of cases will do away with this error to a great extent. Hospitals, electrocardiographs, and x-ray machines are by no means always essential. It was reliance upon skilled use of eyes, ears, fingers, and brain rather than on instruments that made Laennec, Traube, Skoda, Mackenzie the experts they were.

4. Failure to treat radically cases that are either now severe or that later may become so.

Probably most of us adopt radical measures when a patient comes to us with dyspnoea, cyanosis, cough, enlarged liver, oedema, albumen, and with a struggling heart. We prescribe rest, restricted diet, and digitalis.

Some of us, however, fail to recognize the full value of prescribing the same treatment, perhaps carried out to a less extent, when the evidences of heart failure are slight. Yet here is really the golden opportunity to ward off a breakdown. A slight increase in cardiac rate, an easily provoked dyspnoea, an irritating cough with a few rales at the lung bases, a tender, enlarged liver—these should be regarded as indications for immediate treatment. What may be termed relative rest may be enjoined, strenuous exercise is forbidden, work is to be done with less tenseness and more slowly, the hours of quiet and sleep are lengthened, diet is modified, and suitable doses of digitalis given. It is gratifying to see how promptly many of these patients will improve on this treatment that is at

once active and prophylactic, active in that it recognizes and combats a beginning breakdown of the heart, prophylactic in that it prevents the complete giving out of that organ and avoids the necessity of a prolonged period of inactivity. These facts are so well known that perhaps an apology is due for bringing them to your attention. But unless reminded by frequent repetitions we are prone to forget even the simplest and baldest of truths.

This is a good place to call attention to a fact that is frequently overlooked, that certain chronic diseases of the respiratory tract may cause serious heart difficulties. If these diseases are recognized early and appropriately managed the early cardiac disaster may at times be avoided. Every condition that interferes for long with the easy entrance and exit of air to and from the lung or that prevents the free respiratory excursion of the chest wall or that diminishes the extent of the pulmonary vascular area, has as an end result a strain on the right heart. A large intrathoracic goiter compressing the trachea, a marked spinal curvature deforming the chest, extensive pleural adhesions restricting the active movements of the thoracic cage, emphysema with its resulting lessened pulmonary circulation—these are examples of this type of disease.

Consider for a moment a marked kyphoscoliosis. The chest is deformed, with the result that the heart, the vessels, the large and small, bronchi are distorted and work at a disadvantage. The extra task that devolves upon the heart of forcing blood against these obstacles results in hypertrophy usually well marked on the right side. Later there are dilatation and muscle fatigue, with dyspnoea, cyanosis, oedema. The patient is apt to die a heart death. He has what in some hospitals is epitomized as "the hunchback's heart". A large percentage do not live beyond 50. Men more subjected to physical strain than women have a shorter life span.

An individual afflicted with such a deformity seldom realizes the danger that lies ahead. The doctor, be he the family doctor or orthopedic specialist, who is wide awake to the serious possibilities may warn against an over strenuous life exactly as he would if he recognized in an individual a leaky mitral or aortic valve. Restriction of overactivity,

sensible habits of living, may add many years to his life, years not of invalidism, but of useful wage-earning activity.

Similarly with emphysema. As an undergraduate and interne I regarded emphysema as a postmortem curiosity. I must have had my attention attracted to senile and compensatory emphysema. But early in my practice when I saw a death directly due to a pulmonary hemorrhage the result of hypertrophic emphysema, I realized that it was a serious affair. Then I saw one of my patients every year a little more distressed for breath, more cyanotic, with his chest full of the wheezing rales of his winter cough that now hung well over into the summer. When I saw this patient die the cardiac death with orthopnoea, extreme oedema and albuminuria, with pulmonary infarcts, I was again made aware of the fact that the inefficient barrel-shaped chest, the distended alveoli with their elasticity largely gone, the diminished pulmonary vascular area, all these things had thrown a burden on the heart that it finally could not endure. It had to break under the strain.

Much can be done for the cough of the patient with emphysema and the beginning heart failure if we prescribe rest and digitalis. But for some patients, those whose bronchial cough recurs with increasing severity every winter, the best prescription—it will not always work, it is not always possible for economic reasons for the patient to follow the doctor's advice—is a change of climate. Away from the dusty occupation, in the clear, sunny climate of the South or Southwest some of these patients are relatively free from the coughs and the asthmatic phenomena that lead so easily to the dread emphysema.

I believe it was Traube who called attention to the fact that extensive pleural adhesions, especially if they are bilateral, restrict to a harmful degree the free excursion of the chest wall and thus interfere with the ventilation of the lung, leading at times to serious embarrassment of the heart.

This cannot always be avoided. But there is one suggestion that may be helpful regarding the proper treatment of large pleural effusions. If such effusions occur gradually and with little pain there may be slight incon-

venience. If there is little cough and only slight dyspnea and particularly if there is fever, the physician may be led to follow the old advice that under these circumstances he is not to tap. But this delay in aspiration leads at times to unfortunate consequences. As the pleura has filled, the mediastinum with the heart and other contents has been pushed to the opposite side. Kept in this position for many days or even weeks it may, when the fluid is slowly absorbed, be unable to return to its old location because restrained by adhesions that have had ample time to form. The lung, too, has been compressed into a wad against the spinal column, has become airless, carnified, and is held back. With absorption of fluid the chest wall sinks in by atmospheric pressure, adhesions contract, there is distortion of blood vessels and air channels and after months or years the heart begins to fail and our patient comes to us with complaints as to his heart—palpitation, rapid beating, dyspnoea. Even with enforced rest and digitalis relief may be only temporary. No hard and fast rules as to time of aspiration of fluid need be laid down. But it may be said safely that in some cases earlier withdrawal would have been advisable, at a time when the lung was still capable of re-expanding and filling the affected side and the heart was still capable of coming back to, or near to, its old location. The direful cardiac results might have been avoided by earlier withdrawal of fluid.

5. The improper prescribing of rest.

If one were asked which has the greater therapeutic value, rest or digitalis, there are many who would answer "rest". The value of rest is well recognized by the profession. In general, too, rest in the treatment of heart disease is intelligently prescribed and faithfully carried out.

The error is seen, however, of not discriminating between the existence of heart disease in an anatomical and in the physiologic sense, *i.e.*, with disturbance of function. Every once in a while patients are brought in who have been advised that activities must be cut to the minimum, all athletics forbidden, occupation changed because a heart murmur has been heard. Or the pulse is 80 or an extrasystole has been noted. In some instances rest

in bed for months has been ordered. With no rheumatic or syphilitic history, no change in size of heart, no altered second tones, no goiter, no dyspnoea or cyanosis, this is to say the least extremely radical advice. It is unnecessary. Furthermore, it upsets the morale of the patient. Even with valvular or myocardial disease, judgment must be used in prescribing rest. The severe case may need complete rest for a time, the milder case needs relative rest, the well compensated, symptomless case may be allowed considerable freedom—dancing, golf, non-competitive swimming, perhaps even tennis.

Over against this error of prescribing unnecessary rest is the other error of not prescribing it early enough or not insisting that it should be carried out rigorously. Rest in acute rheumatic carditis is regarded by all as of extreme value. It is also indicated in a threatened or present breakdown in a chronic case. In some cases of high blood pressure and of angina pectoris, rest at the beginning of treatment is of great benefit. When to permit the patient to leave the bed and to resume gradually the old activity must be decided by the condition in the individual case rather than by some fixed rule. In general, the mistake is to let the patient up too soon. After acute carditis temperature should be normal, pulse rate close to or quite normal, pulse not too irritable, blood of fairly good quality before the child leaves the bed. After a breakdown days or weeks of relative or complete inactivity are often necessary before a good tone has been re-established in the heart muscle. Convalescent homes, if available, are here of great service.

There is another side to this question, however. Some hearts are flabby from long inactivity, from anemia, from poor nourishment. Some hearts need carefully graduated exercise, some need fresh air, sunshine, iron. Some need more food, especially carbohydrates.

6. Digitalis.

Digitalis is our most valuable drug in heart disease. In the mind of the practitioner digitalis is so intimately associated with heart disease that almost automatically it is prescribed when heart disease is found to exist. This is often done without thought as to the

reasons for its use. The commonest mistake as to drug treatment is the giving of digitalis when it is not necessary. Fortunately it rarely happens that direct harm comes from giving the drug; the doses are usually small or moderate in size. The harm is oftener registered in the mind of the patient. He becomes too heart-conscious and may thus be helped on his way to becoming a neuropath or a cardiophobe.

It cannot be too strongly emphasized that a simple murmur, a respiratory arrhythmia, an occasional extrasystole, a slight variation from a supposedly normal blood pressure, a precordial pain, even though it may be cardiac in origin, are not always indications for digitalis. Even a definite valvular disease or myocardial degeneration may exist and this remedy be properly withheld. The best guide as to the giving of this drug is evidence of heart weakness—dyspnoea, cyanosis, rapid heart, rales, oedema, albumen. Especially is it in order when there is complete irregularity of the heart, *i.e.*, auricular fibrillation. What object is there in giving the drug to a patient who has a valvular disease when the heart is doing its work well, when there are no symptoms of heart failure? It is like telling a patient to use a crutch because a scar has been discovered showing where an old osteomyelitis had been present.

Another mistake is to give the drug in too small a dose. When a fairly prompt result is desirable, ten drops of the tincture three times a day is far too little. Even ten minims will not take hold until valuable time may have been lost. While the very large initial doses that have been recommended by some are rarely indicated it is certainly wiser when a patient is showing beginning dropsy, rales, cyanosis, marked dyspnoea to start with twenty or thirty drops three or four times a day than with the smaller one. As favorable results are noted the dose may be reduced.

There is a personal element that plays a large part in the use of digitalis, a personal element that concerns the patient as well as the doctor. There are the peculiarity of the patient and the demands of his particular disease. This means individualization as to dose and length of time it should be continued. Hard and fast rules cannot be given

or if given cannot be too rigidly followed. The efforts to secure standardization of the drug—by the cat unit or the frog methods—are to be strongly endorsed. One cannot so wholeheartedly endorse all the efforts that are sometimes put forth to lay down arbitrary rules as to what preparation, what dose, how often, for how long, and in what limited conditions the drug should be given. Much depends on the reaction of the patient, the recurrence of symptoms on withdrawal. Here comes in the element of personality as it concerns the physician. The individual preferences of the practitioner for particular preparations and his knowledge of how to handle particular preparations must all have weight in the decision. The powdered leaf strongly advised by a New York Committee has much to recommend it as the standard, most reliable form. An average dose may be one and one-half grains, the equivalent of fifteen minims of standardized tincture. For long continued use—and this seems proper in some cases—smaller doses may be given with advantage, doses that experience shows are just sufficient to “hold the patient” and doses not attended by any of the signs of toxic accumulation.

Occasionally too large doses are given. The danger here is chiefly from giving over too long a period. Once in a critical case I advised the doctor to give digitalis immediately, “half a teaspoonful or even a teaspoonful of the tincture at a dose”. A month later I was called again. Marked improvement had followed the treatment instituted. But lately something was wrong—extrasystoles, vomiting, headache, etc. I asked what treatment was now being carried out and was told that my original suggestion, a half teaspoonful of the tincture four times a day, was being faithfully adhered to by both patient and physician. A decided cutting down of the dose and the toxic symptoms disappeared. The patient, I am told, is still living fourteen years after the two crises, the one in which she was getting no digitalis and the one in which she was getting too much.

It is rarely necessary to give digitalis except by mouth. At times it works better intramuscularly. Very occasionally its use per rectum is advantageous. It need be used in-

travenously only in emergencies and then using only the preparations that are especially prepared for this method of medication. Where prompt emergency measures are necessary the intravenous use of strophanthin—the ampoule preparation—in an initial tryout dose of about 1/200 or 1/300 of a grain is in order. If the patient has been previously digitalized even this small dose is risky. If no bad effects result from the small dose, this same dose or even a larger one may be given. It is to be remembered, however, that strophanthin—or ouabaine—is a powerful remedy and to be used with discretion.

Congestive heart failure, especially associated with auricular fibrillation, is the field of greatest usefulness of digitalis. In other conditions, however, it may be of value. Before fibrillation has set in or where it has occurred in paroxysmal form; in cases of hypertension with cardiac asthma and dyspnoea on exertion; in some cases of rapid, weak heart in infectious diseases the drug may be safely given and at times with good effect.

To repeat, there is room for individualization here. The wise practitioner will follow the rules of the experts who have made laboratory and clinical investigations, but must yet be prepared to trust his own judgment as to the needs of the particular patient he is treating and his consciousness of his ability to get results in one way better than in another.

7. What of opium? Some doctors are afraid to use it in heart disease. They fear a weakening of the heart. As a matter of fact opium tends to give the heart rest and strength. Of all the sedatives and hypnotics it is the most reliable. Its effects are more certain than those of any other of the long list of old or new hypnotics and sedatives. Its dosage is better known and more accurately controllable. For years it has remained as the standby while other remedies, chiefly synthetic, have had their brief days. To advocate its use does not imply that other remedies of the sedative and hypnotic class have no place. Many such drugs are of value. But more reliance can be placed on opium than on the others. Where pain is severe it is the only remedy. With persistent cough, with the spasmodic dyspnoea of some hyperten-

sion cases, with stubborn insomnia it brings the surest results in the safest way. That there is danger of inducing the opium habit must be recognized. It must be given with discrimination. Caution is necessary, especially in chronic cases associated with much nervousness. Here it may be wise to administer it in no other way than hypodermically. This keeps the control of its use in the hands of the doctor.

8. A mistake is sometimes made regarding catharsis. The bowels should, of course, be kept open. Where there is oedema catharsis is sometimes pushed so far as to weaken the patient and lead to a very annoying irritation of the bowel. Rest, restriction of diet, digitalis with gentle laxatives will often accomplish as much as the more drastic purges. Here again, as regards cathartics, there is need for individualization. The peculiarities of the patient, the urgency of the indications, the individual preferences of the physician and his familiarity with the remedies may play conspicuous parts in determining the choice of laxatives and the doses in which they are employed.

9. Oedema is an ominous sign in heart disease. It speaks for heart weakness or co-existing renal disturbance or both. But oedema is often more than a sign. It may become a threatening complication. Fluid accumulations in the pleura and pericardium may embarrass the heart and lung. Extensive ascites will interfere with respiratory efforts of the diaphragm. Waterlogged tissues in the stomach, bowel, liver, kidney, skin, muscles of the trunk and extremities mean poor performance of function. Treatment must at times have as its aim the removal of this surplus of offending fluid. Rest, restricted fluids, digitalis will often result in free diuresis and loss of oedema. Diuretics may be helpful. Among the most useful are the xanthine bodies, the theobromine compounds—diuretin, theocin, theocalcin, etc. If the renal efficiency is disturbed only by passive congestion, *i.e.*, if a genuine inflammatory or degenerative process is not present the results obtained by these remedies are sometimes all that could be desired. Novasurol and salyrgan may also be of service. Caution is necessary here for these mercurial

compounds may cause damage to the kidneys. For this reason many good clinicians avoid using them. Finally, one should not forget that in refractory cases with much free fluid in the pleurae and the abdomen paracentesis may be helpful. To see the marked improvement in the action of heart and lung following withdrawal of a quart or a quart and a half of pleural fluid, the lessened cyanosis and dyspnoea, the pickup in the amount of urine is to have a convincing proof of the benefit to be derived in these waterlogged cases from this simple operative procedure that is so often too long postponed. Similar good results may follow a tap of the abdomen. Puncture of the skin of the oedematous legs with the slow oozing of the fluid from the subcutaneous tissue also has a place. The danger here is that even with most meticulous care as to asepsis the skin and cellular tissue are apt to become infected. Local inflammation with extensive sloughing may result. Even more general sepsis at times follows.

10. A word regarding the treatment of angina pectoris.

The commonest mistake in the treatment of angina is to place the main reliance on drugs. Nitrite of amyl or nitroglycerin are, of course, in order in the warding off or cutting short an attack of angina of effort. In many cases drugs are of unquestioned value—the iodides, the theobromine compounds. But of still greater service is the regulation of the mode of living. Getting the patient to cut down on the excessive use of tobacco and alcohol, to reduce hours of work, to get longer periods of rest and relaxation, to throw off the burden of nonessential responsibilities with their attendant worries, to learn how to walk more slowly, to act more deliberately; in brief, how to take it easy. This is the prescription that often gives better results than do drugs.

An old Norwegian lady with angina reported to me after an absence of two years that she was very much better. "Ah," I said, "I thought that medicine would help you." It was potassium iodide. "Well, doctor, to tell you the truth, I don't think the medicine did much good. It was the lecture you gave me. You told me not to try to run the whole

town as I was doing two years ago. I was bossing the church, the community club, the Red Cross; I was running things all right. That calling down you gave me was worth more than the medicine."

There should be directions as to diet, stressing especially the avoidance of bulky meals and of rich foods. There must naturally be details; arbitrary directions may be advisable. Yet often the patient must tell us how far and how fast he *can* walk. This may determine what we tell him he *may* do. He is to stop short of bringing on the pre-cordial distress.

In some patients, especially those whose blood pressure is high, whose nerves are frazzled and tense and seem near the breaking point much good comes from a preliminary rest in bed. The patient is taught that he can relax and how to relax, his diet is regulated, business and other worries are kept from him. He learns *how* to take care of himself in the same way patients with tuberculosis do by a month's life in a sanitarium.

That angina is a serious disease, that it often baffles our efforts at cure or relief, that prognosis in a given case is a matter of extreme uncertainty, this is well known and must be admitted. Yet the treatment of angina pectoris is far from a thankless task. I think it is Hans Kohn who uses the expression. Relief from suffering, prolongation of life, even recovery are not unusual.

11. One brief caution regarding the treatment of syphilitic disease of the heart and aorta. Syphilitic aortitis, whether there is aneurysmal dilatation or not, would seem to be a condition that should be hit hard with arsenic. But often the mouths of the coronaries are involved. Intensive treatment may cause an acute swelling of the syphilitic lesion and such swelling may be sufficient to close the coronary opening with fatal consequences. A safer way is to use first iodide and mercury in moderate doses and then to use the arsenicals in gradually increasing amounts.

In conclusion may I venture to call attention, rather dogmatically, to a few important lessons that are involved in these eleven topics? Understand, please, when I address *you* in the second person that I and the absent third person are also included.

Be sure the disease is one of the heart before you treat it as such.

Be sure the heart disease is grave enough to warrant such treatment before prescribing rest, digitalis, or other radical procedure.

Be sure if the disease is serious or threatens to become so, that the treatment is thorough, not too long deferred, not too soon discontinued. Let the treatment fit the disease, not the anatomic disease, rather the physiologic.

Be sure to consider the patient as well as the disease in your treatment and in the manner of discussion of his ailment.

Be sure to individualize in advising, and in prescribing drugs or other remedial measures.

PROCEEDINGS OF THE HOUSE OF DELEGATES OF THE MEDICAL ASSOCIATION OF GEORGIA

FIRST MEETING

Tuesday, May 12, 1931

The House of Delegates was called to order at the Atlanta Biltmore Hotel, Atlanta, Georgia, at 2:30 p.m., by the President, Dr. G. Y. Moore, Cuthbert.

Roll Call

The Secretary stated that he held in his hand the signed roll of the following forty-nine delegates and councilors, and moved that this constitute the roll call of this meeting:

M. C. Pruitt, Fulton County.
J. W. Simmons, Glynn County.
O. A. Mulkey, Jenkins County.
M. A. Clark, Macon (Parliamentarian).
E. H. Lamb, Habersham County.
J. W. Palmer, Montgomery County.
C. L. Ayers, Councilor 9th District.
W. R. Dancy, Savannah (Ex-President).
E. S. Peacock, Washington County.
W. S. Cook, Dougherty County.
J. P. Turk, Cherokee County.
J. A. Redfearn, Councilor 2nd District.
S. T. R. Revell, Jefferson County.
A. G. Fort, President-Elect.
G. A. Traylor, Vice-President.
W. F. Wells, Fulton County.
M. T. Benson, Fulton County.
C. C. Aven, Fulton County.
F. S. Rogers, Randolph County.
Howard Hailey, Fulton County.
M. H. Roberts, Fulton County.
J. Z. Henry, Clayton-Fayette County.
H. D. Allen, Jr., Vice-Councilor 10th District.
G. L. Echols, Baldwin County.
J. E. Penland, Ware County.
C. S. Pittman, Tift County.
O. W. Roberts, Councilor 4th District.
C. S. Floyd, Walton County.
O. D. Gilliam, Muscogee County.
O. D. King, Carroll County.
Charles Adams, Crisp County.
J. O. Elrod, Forsyth County.
M. M. McCord, Councilor 7th District.
J. G. Smith, Henry County.
G. H. Lang, Chatham County.
W. A. Selman, Vice-Councilor 5th District.
W. E. McCurry, Hart County.
W. A. Norton, Chatham County.

T. C. Davison, Fulton County.
J. C. Patterson, Councilor 3rd District.
M. M. Head, Councilor 6th District.
C. B. Almond, Barrow County.
L. C. Allen, Jackson County.
W. A. Mulherin, Augusta (Ex-President).
J. B. Kay, Bibb County.
E. C. Thrash, Councilor 5th District.
W. H. Myers, Councilor 1st District.
President Moore and Secretary Bunce.

The motion to accept the roll call was regularly seconded and carried and President Moore declared the House of Delegates duly constituted for the transaction of business.

Appointment of Reference Committee

The President appointed the following gentlemen to serve as a Reference Committee: T. C. Davison, Atlanta, Chairman; C. L. Ridley, Macon; W. A. Mulherin, Augusta; L. C. Allen, Hoschton; F. S. Rogers, Coleman.

Motion carried to revise the resolution creating the Reference Committee to make it conform to the Constitution and By-Laws of the Association: "That reports and recommendations may be referred to the Reference Committee in the absence of any special committee already created and organized."

The motion was introduced by Dr. E. C. Thrash, Atlanta, and the necessity of the amendment explained by Dr. M. A. Clark, Macon, Parliamentarian.

Reports of Officers

Vice-President G. A. Traylor took the chair and Doctor Moore presented the annual report of the President, as follows:

The past year has made me realize more fully than ever before what it means to a state to have its medical men organized.

Our Medical Association has power and influence, we stand for the highest motives, trained for service and inspired by the science which is most beneficent in effect, we should be proud of membership in such an organization, and justly proud of the contributions our profession has made to the advancement of medical science and art in the different branches.

I am indebted to you for the honor of being chosen your President.

The work has been an inspiration as I've gone into one hundred and forty two counties. It has given me the opportunity to know in a more intimate way the men and the work which has broadened and strengthened me.

The close of a year's work makes us take a retrospective glance, I have fallen far short of the goal, many things have not been accomplished which is a source of regret; however, I beg to submit the following report.

Visits have been made to every district association, many county societies, Woman's Auxiliaries, P. T. A. meetings, Nurses' Association, Malarial Conferences, T. B. Conference, Chattahoochee Valley Medical and Surgical Association, Child Health and Protection, University of Georgia and Emory Clinics, Public Policy and Legislation Committee meetings, Councilors and Scientific Committee meetings, Medical History Committee, Civic Clubs and Masonic Lodge. Five thousand letters mailed to doctors in Georgia urging better organization, collection of dues and asking them to contribute to the Medical History of Georgia.

I take pleasure in announcing that district associations are having two meetings a year.

We have sponsored Health Week and May Day Programs, health work in drouth areas, Calhoun lectureship, Crawford W. Long Memorial Prize, sixty health units as outlined by the State Board of Health, Cancer Commission, in fact we have sponsored every-

thing for the betterment of health conditions in Georgia.

I wish to express again the honor of having been President of The Medical Association of Georgia which is among honors to be most prized and among recollections the happiest of a lifetime. I am gratefully appreciative of cordial fraternal cooperation which has been given me during the year.

It gives me pleasure to express appreciation of the help so generously given me by Dr. Bunce, the Secretary-Treasurer of the Association, and Mr. Rowe, Manager of the best State Journal in America.

The President then resumed the chair.

President-Elect Dr. Arthur G. Fort presented the following report:

Mr. President and Gentlemen of the House of Delegates of the Medical Association of Georgia:

I wish to publicly acknowledge my deep feeling of gratitude for the signal honor given me in my election at the hands of the members of this Association. Nothing impresses me more than the responsibility it carries with it.

While this is true my conception of the duties and activities of a President-Elect is that he is a member of the different committees and an invited guest of the different medical unit organizations, by courtesy, and is permitted these privileges in the capacity of a student so as to give him the opportunity of serving better during his term of office as President.

With this idea in view I have attended eight District Societies, covering the State from Toccoa to Americus, from Vidalia to Washington and Savannah.

As to committees, I have attended every meeting of which I have been informed.

My relations with the officers of our Association have been most cordial and pleasant. No organization has, as President, a man more deeply interested than our President, Doctor G. Y. Moore, nor a Secretary-Treasurer and Executive Secretary more efficient than Doctor Bunce and Mr. Rowe.

Respectfully submitted

A. G. FORT.

Report of First Vice-President

DR. G. A. TRAYLOR: I have not been called upon to preside at any meetings, or to perform any other service, so I have no formal report to make.

Report of Second Vice-President: Dr. S. T. R. Revell presented the following report:

I have often heard that "Brevity is the soul of wit." If that be true, and Mark Twain were living, he would have to look to his laurels.

I herewith submit a report of the activities of the Second Vice-President of the Medical Association of Georgia for the current year, ending May 15, 1931.

I attended the Sixth District Medical Society meeting, at Macon, on December 3, and attended my own, the Tenth District Medical Society meetings at Louisville, in August, and at Augusta, in February.

Report of Parliamentarian

DR. M. A. CLARK: I do not know that the parliamentarian need give you an official report. I may say that from time to time in the course of the year matters in reference to the Constitution and By-Laws have been submitted to me and I have attended to them as best I could. It may not be amiss to tell you that in my office I have a copy of the last Edition of Webster's Dictionary, and a copy of the last issue of Roberts' Rules of Order, and in my home I have a copy of the last Edition of the International Dictionary and, strange to say, I study them from time to time. More and more I am impressed by the fact that when we wish to express ourselves fully we resort to the Anglo-Saxon. I am reminded in our conferences each year that our delegates forget the word "think" from time to time. If they would remember to use the word

think a little more often it would be easier for the presiding officers. You may "Look before you leap," and also "Think before you speak." I have with me a copy of Roberts' Rules of Order and a copy of our Constitution and By-Laws, and a real good pair of glasses, and if you wish me to read anything for you I shall try to do it promptly.

Secretary-Treasurer Dr. Allen H. Bunce presented the following report:

FINANCIAL STATEMENT

Receipts

Cash on hand May 1, 1930 \$ 5,193.13
Cash received 16,560.87 \$21,754.00

*Disbursements**

Expenditures \$16,305.70
Cash on hand April 30, 1931 5,448.30 \$21,754.00

DISBURSEMENTS

From

May 1, 1930, to April 30, 1931

No.	DESCRIPTION	Amount
1361—	William R. Dancy, M. D. Expenses to and from Carrollton on duties as President attending the meeting of the Fourth District Medical Society.....	\$ 25.05
1362—	Miss Jessie Stewart. Salary from April 15, 1930, to May 1, 1930, for the Committee on Public Policy and Legislation; work at offices of the State Board of Health	37.50
1363—	E. K. Large, Postmaster. Postage	30.00
1364—	Allen H. Bunce, M. D. Salary as Secretary-Treasurer for April, 1930	150.00
1365—	H. L. Rowe. Salary as Executive Secretary for April, 1930	175.00
1366—	Alliance Printing Company. Printing and mailing 2,175 copies of the April, 1930, issue of the Journal	409.00
1367—	A. S. M. Coleman, M. D. Expenses as Councilor for 1929-30	25.00
1368—	Miss Jessie Stewart. Salary for stenographic work for the Committee on Public Policy and Legislation, May 1st to 10th, 1930, at the offices of the State Board of Health ...	25.00
1369—	Miller's Book Store. Briefcase	8.60
1370—	Auld's, Inc. "Badge of Service" for the President—1929-30	3.34
1371—	Southern Engraving Co. Invoice 1004—cut for illustration	4.80

*Itemized statement of all disbursements is shown by descriptive vouchers.

1372—Wolverine Art Shops. 710 Badges for annual session of Association, Augusta	65.57	1388—Partridge Inn. Current for lights for the com- mercial and scientific exhibitors	40.59
1373—Alliance Printing Co. Printing 800 Pro- grams	\$90.00	1389—H. L. Rowe. Transportation to and from Augusta attend- ing the annual ses- sion of the Associa- tion, May 11-16, 1930	\$18.34
Binding 10 Volumes of 1929 Journals	18.00	Expenses at Partridge Inn	31.50
Printing 435 Double Government P o s t Cards for the Com- mittee on Public Pol- icy and Legislation....	18.75	126.75	49.84
1374—Chas. E. Waits, M. D. Postage, Stationery, telephone, and telegraph accounts, steno- graphic work and multigraph- ing for the Committee on Pub- lic Policy and Legislation	27.74	1390—Cash. Transferring supplies, printing alumni tickets, painting addi- tional signs, wires, regular and extra help arranging for com- mercial and scientific exhibitors before and during the annual session of the Association, Augusta, May 13-16, 1930....	32.53
1375—J. N. Reisman. Rent for May, 1930	21.50	1391—Sou. Bell Tel. & Tel. Co. Telephone and telegraph account to May 1, 1930	25.57
1376—Southern Stamp & Stencil Co. Rubber stamp for use on en- velopes—"First Class Mail"	1.70	1392—Kenneth M. Lynch, M. D. Expenses attending annual ses- sion of Association, Augusta, Invited Guest	19.25
1377—Benj. F. Stovall. Multigraphing letters for mail- ing Delegate's Credential Cards	2.50	1393—J. A. Redfearn, M. D. Expenses incurred as Councilor for the Second District to June 2, 1930	20.00
1378—Southern Press Clipping Bureau. News Clipping for April, 1930	5.00	1394—M. M. Head, M. D. Expenses incurred as Councilor for Sixth District for fiscal year ending April 30, 1930....	8.56
1379—Lester Book & Stationery Co. Carbon, ribbons, pencils, and Gem clips	4.30	1395—Medical Department University of Georgia. Expenses incurred for Dr. S. J. Lewis as Councilor for the Tenth District	3.66
1380—Atlanta Envelope Co. 10,275 envelopes and 2,000 letterheads	43.20	1396—Partridge Inn. Account of Dr. C. B. Wright, Minneapolis, as Invited Guest of the Association	15.25
1381—Sou. Bell Tel. & Tel. Co. Telephone account	10.11	1397—Sou. Bell Tel. & Tel. Co. Account for telephone and serv- ice connection charges to May 11, 1930	10.10
1382—R. F. Dressel. Painting signs for commercial and scientific exhibitors	36.00	1398—Western Newspaper Union. Preparation charge for three column article and shipment of plates to 100 newspapers of the state for the Committee on Pub- lic Policy and Legislation	165.00
1383—Chas. B. Wright, M. D. Payment on expenses attending annual session of the Association as Invited Guest	50.00	1399—A. B. Dick Co. Cellotype and memiotype S. paper for Committee on Public Policy and Legislation	58.05
1384—Chas. B. Wright, M. D. Balance expenses attending an- nual session of the Association as Invited Guest	100.00	1400—Whitaker Paper Co. Covers for addresses of speakers for the Committee on Public	
1385—T. R. Maxwell Co. Rent on 40 tables for exhibitors during annual session of Asso- ciation in Augusta	20.00		
1386—Miss Elizabeth Hill. Work at Registration Desk dur- ing annual session of the As- sociation, Augusta, May 13- 16, 1930	20.00		
1387—Mrs. Irene H. Snyder. Payment on reporting and tran- scribing proceedings of the an- nual session of the Association, Augusta, May 13-16, 1930....	150.00		

Policy and Legislation.....	6.13	1416—Bryan & Middlebrooks, Attys. Expenses for transportation, pullman, hotel, and meals to and from Bainbridge to repre- sent Dr. A. E. B. Alford in suit of Mrs. Abbie R. Davis.....	65.54
1401—State Board of Health. Mimeograph paper, mimeograph letterheads, postage, envelopes and health examination blanks for Committee on Public Policy and Legislation	59.65	1417—E. K. Large, Postmaster. Postage	30.00
1402—Miss Annie Jacks. Commission on advertising of Eager & Simpson	6.25	1418—M. M. McCord, M. D. Expenses incurred as councilor for the Seventh District.....	12.00
1403—Allen H. Bunce, M. D. Salary as Secretary-Treasurer for May, 1930	150.00	1419—E. C. Thrash, M. D. Payment on expenses as delegate to the American Medical Asso- ciation, Detroit session, June 23-27, 1930	100.00
1404—H. L. Rowe. Salary as Executive Secretary for May, 1930	175.00	1420—Wm. H. Myers, M. D. Payment on expenses as delegate to the American Medical Asso- ciation, Detroit session, June 23-27, 1930	100.00
1405—Alliance Printing Co. Printing and mailing 2,100 copies of the May, 1930, issue of the Journal	409.00	1421—O. H. Weaver, M. D. Payment on expenses as delegate to the American Medical Asso- ciation, Detroit session, June 23-27, 1930	100.00
1406—Atlanta Journal Co. Publishing notices in reference to public speakers for the Com- mittee on Public Policy and Leg- islation	15.12	1422—Mrs. Irene H. Snyder. Balance account for reporting and transcribing proceedings of the general meetings of the eighty-first annual session of the Association, House of Dele- gates, Minutes of the Council, and committee meetings, Augus- ta, June 13-14-15-16, 1930....	331.90
1407—The Whitaker Paper Co. One Ream 20x26-50 blue Riverdale paper for Committee on Public Policy and Legisla- tion	6.13	1423—Sou. Bell Tel. & Tel. Co. Telephone account to June 11, 1930	8.65
1408—Atlanta Envelope Co. 8,000 Letterheads 8½x11	37.60	1424—Postal Telegraph Co. Wire sent collect from the Co- operative Medical Advertising Bureau in reference to Squibb's ad for June .....	.60
1409—Southern Engraving Co. Cut from photo of Wm. R. Dancy, M. D., President of the Association, 1929-30, for use in the May, 1930, issue of the Journal	4.20	1425—J. L. Campbell, M. D. Expenses incurred by Cancer Commission, inviting speakers to the Augusta meeting.....	10.15
1410—Alliance Printing Co. 500 Reprints of article by L. Minor Blackford, M. D., Asso- ciate Editor of the Journal, en- titled "Congenital Heart Dis- ease"	9.50	1426—Allen H. Bunce, M. D. Salary as Secretary-Treasurer for June, 1930	150.00
1411—E. K. Large, Postmaster. Deposit for postage for mailing Journal	25.00	1427—H. L. Rowe. Salary as Executive Secretary for June, 1930.....	175.00
1412—The Daily Georgian. Publishing notice in reference to public speakers for the Commit- tee on Public Policy and Legis- lation	12.60	1428—J. P. Corry. Advance payment for Commit- tee on Medical History of Geor- gia for work of compiling his- tory	250.00
1413—J. N. Reisman. Rent for June, 1930.....	21.50	1429—Benj. F. Stovall. Multigraphing letters to secre- taries of county and district	
1414—Eastman Kodak Stores, Inc. Rent of machine and operator for Committee on Public Policy and Legislation	10.00		
1415—Western Union Telegraph Co. Telegraph account for May, 1930	5.73		

	societies in reference to news items and dates of district meetings	4.00		July, 1930, issue of the Journal	409.00	
1430—Southern Press Clipping Bureau.	News clippings for May and June, 1930	10.00	1443—Atlanta Envelope Co.	150 Extra copies of the Journal for the Nurses' Association....	15.00	475.00
1431—J. N. Reisman.	Rent for July, 1930	21.50		1,500 Voucher Checks		38.65
1432—Alliance Printing Co.	100 Reprints of article by J. C. Massee, M. D. \$ 12.75		1444—Sou. Bell Tel. & Tel. Co.	Telephone account to July 11, 1930		10.05
	2,600 Reprints of article by L. Minor Blackford, M. D. 96.00		1445—Allen H. Bunce, M. D.	Salary as Secretary-Treasurer for July, 1930		150.00
	(Both as Associate Editors of the Journal.)		1446—H. L. Rowe.	Salary as Executive Secretary for July, 1930		175.00
	Printing and mailing 2,050 copies of the June, 1930, issue of the Journal	409.00	1447—J. P. Corry.	Payment on compiling History of Medicine in Georgia for the Committee on History of Medicine in Georgia		90.00
1433—Western Union Telegraph Co.	Telegraph account for June, 1930 .....	.60	1448—J. P. Corry.	Payment on compiling History of Medicine in Georgia for the Committee on History of Medicine in Georgia		10.00
1434—Lester Book & Stationery Co.	T. W. Ribbon, wrapping paper, twine and letter folders.....	4.05	1449—Southern Press Clipping Bureau.	News clippings for July, 1930		5.00
1435—Miss Ethlene Hale.	Special stenographic work from January 1 to June 30, 1930..	18.30	1450—Lester Book & Stationery Co.	Twine, wrapping paper, T. W. Ribbon, Gem clips, and onion skin paper		4.85
1436—Shelly Benton.	Cleaning section of supply room and transferring records of Association	4.00	1451—Atlanta Envelope Co.	6,500 Letterheads and 3,000 Envelopes for the officers and chairmen of committees		51.94
1437—Dietz Studio.	Six photos from book by Andreae Vesalii for illustrations	10.00	1452—Southern Engraving Co.	Invoice No. 1452—Cut for illustration \$ 4.22		
1438—Henry R. Slack, M. D.	Telegrams in reference to the Pharmacopeial Convention, Washington, D. C.	1.95		Invoice No. 1559—Cuts from drawings by Vesalius for illustrations	38.25	
1439—E. K. Large, Postmaster.	Postage	30.00		Total	\$42.47	
1440—J. P. Corry.	Payment on compiling Medical History of Georgia for the Committee on History of Medicine in Georgia	250.00		Less 5%	2.12	40.35
1441—C. L. Ayers, M. D.	Expenses as Councilor for the Ninth District to July 23, 1930	17.00	1453—J. N. Reisman.	Rent for August, 1930		21.50
1442—Alliance Printing Co.	500 Reprints for Wm. R. Dancy, M. D., of Presidential address	\$ 51.00	1454—Benj. F. Stovall.	Multigraphing outline of History of Medicine in Georgia, letters to Ex-Presidents, members of Fulton County Medical Society, and letters to officers of county societies, and cards in reference to reprints and abstracts		25.85
	Printing and mailing 2,050 copies of the		1455—Alliance Printing Co.	400 Reprints of address before Woman's Auxiliary by G. Y. Moore, M. D., President		18.27

1456—J. P. Stevens Engraving Co. 2,500 Letterheads and 2,500 envelopes for G. Y. Moore, M. D., President of the Association	54.85	ciation, Augusta	10.75
1457—E. K. Large, Postmaster. Postage	30.00	1471—Benj. F. Stovall. Multigraphing letters to officers of county and district societies in reference to programs and news items for the Journal of the A. M. A. and cards to de- linquent members	8.50
1458—J. P. Corry. Payment on compiling History of Medicine in Georgia for the Committee on History of Medi- cine in Georgia	100.00	1472—J. N. Reisman. Rent for September, 1930	21.50
1459—C. Thompson, M. D. Expenses incurred attending Council meeting on August 20, 1930, as representative of First District	26.94	1473—Southern Press Clipping Bureau. News clippings for August, 1930	5.00
1460—E. K. Large, Postmaster. Deposit for postage to mail Journal	25.00	1474—Addressograph Sales Agency. Ribbon for Addressograph	.95
1461—Dietz Studio. Photos from illustrations in work of Vesalius	5.80	1475—J. P. Corry. Payment on compiling History of Medicine in Georgia for the Committee on History of Medi- cine in Georgia	75.00
1462—Sou. Bell Tel. & Tel. Co. Telephone account to August 11, 1930	6.00	1476—J. P. Corry. Payment on compiling History of Medicine in Georgia for the Committee on History of Medi- cine in Georgia	75.00
1463—Alliance Printing Co. Printing and mailing 2,200 copies of the August, 1930, issue of the Journal.....\$425.00 400 Envelopes for mailing reprints sent to Dr. G. Y. Moore, President	5.70 430.70	1477—E. K. Large, Postmaster. Postage	30.00
1464—Allen H. Bunce, M. D. Salary as Secretary-Treasurer for August, 1930	150.00	1478—Alliance Printing Co. Printing and mailing 2,100 copies of the September issue of the Journal, 150 extra copies of Journal for Nurses' Association, tipping inserts, zinc etching, mounting cut and 2,000 mem- bership cards	449.00
1465—H. L. Rowe. Salary as Executive Secretary for August, 1930	175.00	1479—American Surety Co. Premium on Surety Bond No. 237072-D for H. L. Rowe from September 6, 1930, to September 6, 1931	2.50
1466—J. P. Corry. Payment on compiling History of Medicine in Georgia for the Committee on History of Medi- cine in Georgia	150.00	1480—Allen H. Bunce, M. D. Salary as Secretary-Treasurer for September, 1930	150.00
1467—C. L. Ayers, M. D. Expenses incurred as Councilor for the Ninth District to Sep- tember 10, 1930	7.00	1481—H. L. Rowe. Salary as Executive Secretary for September, 1930	175.00
1468—M. M. McCord, M. D. Expenses incurred as Councilor for the Seventh District to September 10, 1930	12.00	1482—J. P. Corry. Traveling expenses incurred com- piling History of Medicine in Georgia	60.00
1469—Lester Book and Stationery Co. Pencils and paper for sending out tentative outline of History of Medicine in Georgia	6.65	1483—Bryan & Middlebrooks, Attys. Traveling expenses to and from Colquit county to try case of Dr. S. E. Sanchez, Barwick, vs. Mrs. W. C. May Jordon	26.83
1470—Alliance Printing Co. 200 Reprints for Kenneth M. Lynch, M. D., Charleston, S. C., Invited Guest of the Asso-		1484—Lester Book & Stationery Co. Dater, Journal for registering names of members, index tabs, ink, paste, pencils	10.35
		1485—Southern Press Clipping Bureau. News clipping for September,	

1930	5.00	Dalton in reference to suit Alex Prather vs. Dr. G. L. Broad-drick	1.40
1486—Southern Engraving Co. Invoices Nos. 1757-1861, cuts for illustrations	9.93	1504—Southern Press Clipping Bureau. News clippings for October, 1930	5.00
1487—J. N. Reisman. Rent for October, 1930	21.50	1505—Lester Book & Stationery Co. Gem clips and paper for use of Committee on History of Medicine in Georgia	4.40
1488—Sou. Bell Tel. & Tel. Co. Account to September 11, 1930	7.15	1506—Miss Annie Jackson. On account for typing History of Medicine in Georgia	65.00
1489—E. K. Large, Postmaster. Postage	30.00	1507—Sou. Bell Tel. & Tel. Co. Telephone account to Novem- ber, 1930	7.20
1490—Bryan & Middlebrooks, Attys. Expenses incurred go- ing to and from Rome, also to Dalton to try case of Alex Prather vs. Dr. G. L. Broaddrick .....\$13.92 One-half cost of re- porting trial of case.. 14.08	28.00	1508—Bryan & Middlebrooks, Attys. Traveling expenses to and from Bainbridge to try case of Geo. L. Davis vs. Dr. A. E. B. Al- ford	34.82
1491—Sou. Bell Tel. & Tel. Co. Telephone account to October 11, 1930	6.00	1509—E. K. Large, Postmaster. Postage	30.00
1492—E. K. Large, Postmaster. Deposit for postage to mail Journal	25.00	1510—Allen H. Bunce, M. D. Salary as Secretary-Treasurer for November, 1930	150.00
1493—The Letter Shop. Multigraphing letters, folding and sealing to all the mem- bers of the Association in reference to History of Medi- cine in Georgia	27.34	1511—H. L. Rowe. Salary as Executive Secretary for November, 1930	175.00
1494—Alliance Printing Co. Printing and mailing 2,200 copies of the October issue of the Journal, tipping insert, and 32 inches type killed.....	427.50	1512—Alliance Printing Co. Printing and mailing 2,100 copies of the November issue of Journal, tipping insert and 32 inches type killed.....	401.50
1495—Allen H. Bunce, M. D. Salary as Secretary-Treasurer for October, 1930.....	150.00	1513—Miss Annie Jackson. On account for typing History of Medicine in Georgia.....	65.00
1496—H. L. Rowe. Salary as Executive Secretary for October, 1930	175.00	1514—Alliance Printing Co. Printing and mailing 2,250 copies of the December issue of the Journal, inserting blanks for remitting dues, cards in refer- ence to advertising for mailing to members and prospective ad- vertisers	432.10
1497—E. K. Large, Postmaster. Postage	30.00	1515—Sou. Bell Tel. & Tel. Co. Telephone account to December 11, 1930	6.00
1498—G. Y. Moore, M. D. Payment on expenses incurred as President of the Association....	300.00	1516—Atlanta Envelope Co. 17,000 Envelopes for mailing the Journal	68.00
1499—Miss Annie Jacks. Commission on advertising Southern and L. & N. Railroads	16.25	1517—J. N. Reisman. Rent for December, 1930, and January, 1931	43.00
1500—Miller's Book Store. Stationery and carbon for copy- ing History of Medicine in Georgia	3.00	1518—Southern Press Clipping Bureau. News clippings for November and December, 1930	10.00
1501—J. N. Reisman. Rent for November, 1930.....	21.50	1519—Southern Engraving Co. Invoices Nos. 2052-2054, cuts for illustrations	7.92
1502—Western Union. Telegraph account for October, 1930 .....	.70	1520—G. Y. Moore, M. D.	
1503—Bryan & Middlebrooks, Attys. Long distance telephone calls to			

Expenses incurred as President during November and December, 1930	50.00	Dr. L. Minor Blackford, Associate Editor of the Journal.....	29.75	
1521—Allen H. Bunce, M. D.		2,000 copies of 4th Edition, Radio Waves	11.25	445.90
Salary as Secretary-Treasurer for December, 1930	150.00	1535—Sou. Bell Tel. & Tel. Co.		
1522—H. L. Rowe.		Telephone account to January 11, 1931		10.50
Salary as Executive Secretary for December, 1930	175.00	1536—Bryan & Middlebrooks, Attys.		
1523—E. K. Large, Postmaster.		Fee for J. A. McFarland, Attorney, for professional services in suit of Alex Prather vs. Dr. G. L. Broadrick, Dalton		75.00
Postage	30.00	1537—Addressograph Sales Agency.		
1524—Miss Annie Jacks.		Ribbon for addressograph .....		.90
Commission on advertising of Southeastern Sanatorium	16.50	1538—Allen H. Bunce, M. D.		
1525—Southern Blue Print Co.		Salary as Secretary-Treasurer for January, 1931		150.00
150 Blue Prints of floor space at Biltmore Hotel, Atlanta, showing sketch of space to be used by commercial exhibitors during the annual session of the Association, May 12-13-14-15, 1931	20.00	1539—H. L. Rowe.		
1526—Bryan & Middlebrooks, Attys.		Salary as Executive Secretary for January, 1931		175.00
Fee for Cleveland & Goodrich, Attorneys, in the case of Brisendine vs. Dr. K. S. Hunt, Griffin	150.00	1540—E. K. Large, Postmaster.		
1527—Miller's Book Store.		Postage		30.00
Paper and carbon for writing History of Medicine in Georgia	11.50	1541—J. N. Reisman.		
1528—Lester Book & Stationery Co.		Rent for February, 1931		21.50
Paper, T. W. Ribbon and ledger	5.35	1542—Bryan & Middlebrooks, Attys.		
1529—Western Union Telegraph Co.		Balance on retainer for 1931 attorneys for Association		750.00
Telegraph account for December, 1930 .....	.35	1543—Southern Press Clipping Bureau.		
1530—E. K. Large, Postmaster.		News clippings for January, 1931		5.00
Deposit for postage to mail Journal	25.00	1544—Miss Annie Jacks.		
1531—The Letter Shop.		Commission on advertising of Pedigree Dairies, Everhart Surgical Supply Co., and Piedmont Hotel		45.00
Multigraphing letters for Dr. G. Y. Moore, President, to county secretaries in reference to history, letters to county secretaries enclosing blanks for reporting payment of dues, and letters to prospective exhibitors at the next session of the Association	13.25	1545—Sou. Bell Tel. & Tel. Co.		
1532—Bryan & Middlebrooks, Attys.		Telephone account to February 11, 1931		6.00
Payment on retainer fee as attorneys for the Association for 1931	500.00	1546—Allen H. Bunce, M. D.		
1533—Miss Annie Jacks.		Salary as Secretary-Treasurer for February, 1931		150.00
Commission on ad for Biltmore Hotel	9.75	1547—H. L. Rowe.		
1534—Alliance Printing Co.		Salary as Executive Secretary for February, 1931		175.00
Printing and mailing 2,175 copies of the January issue of the Journal	\$404.90	1548—E. K. Large, Postmaster.		
2,000 Reprints for		Postage		30.00
		1549—Alliance Printing Co.		
		Printing and mailing 2,050 copies of the January issue of the Journal		350.00
		1550—G. Y. Moore, M. D.		
		Expenses as President through January and February		50.00
		1552—C. L. Ayers, M. D.		
		Expenses as Councilor		9.50
		1553—Lester Book & Stationery Co.		
		Pens, 5,000 yellow second sheets, T. W. ribbon, twine, rubber bands, wrapping paper, paste, pencils		11.80

1554—Massachusetts Bonding & Insurance Co. Premium on Surety Bond, Allen H. Bunce, M. D., April 1, 1931, to April 1, 1932.....	7.50	Telegraph account for March.....	10.75
1555—Southern Engraving Co. Invoice No. 2458—Electro used as illustration	4.11	1573—Southern Press Clipping Bureau. News clippings for March.....	5.00
1556—J. N. Reisman. Rent for March, 1931.....	21.50	1574—The Letter Shop. Multigraphing two sets of letters in name of Dr. G. Y. Moore and letters to doctors on program	8.50
1557—Southern Press Clipping Bureau. News clippings for February, 1931	5.00	1575—Lester Book & Stationery Co. Legal and typewriter paper.....	2.90
1558—Miss Ethelene Hale. Special Stenographic Work.....	14.00	1576—Alliance Printing Co. 250 Reprints for Dr. J. C. Massee, Associate Editor	\$12.85
1559—Sou. Bell Tel. & Tel. Co. Telephone account to March 11, 1931	8.25	Binding 10 volumes of the 1930 Journals	18.00
1560—Bryan & Middlebrooks, Attys. Attorney's fee for Wilson, Bennett & Pedrick, Attorneys for Dr. C. M. Stephens, Waycross, in suit of Mrs. Mattie Evans vs. Dr. C. M. Stephens.....	250.00	May 13, 1930—Check, Dr. W. E. McCurry returned unpaid and paid later	7.00
1561—Allen H. Bunce, M. D. Salary as Secretary-Treasurer for March, 1931	150.00	May 31, 1930—Check, Dr. W. V. Chandler returned unpaid and paid later	7.00
1562—H. L. Rowe. Salary as Executive Secretary for March, 1931	175.00	August 14, 1930—Postdated check, Dr. Sam'l Stampa returned unpaid and paid later	10.00
1563—A. S. M. Coleman, M. D. Expenses incurred as Councilor	30.00	January 6, 1931—Check, Dr. R. B. Lamb returned unpaid and paid later	7.00
1564—E. K. Large, Postmaster. Deposit postage for mailing Journal	25.00	Fulton National Bank—Exchange paid on non-par checks	9.10
1565—Alliance Printing Co. Printing and mailing 2,125 copies of the March issue of the Journal	357.14	TOTAL	\$16,305.70
1566—E. K. Large, Postmaster. Postage	30.00	This report was automatically referred to the Council.	
1567—Miss Louise Reeves. Compiling roster of medical officers from Georgia who served during the Spanish-American War and the World War—1½ weeks at \$17.50 per week....	26.25	<i>Council Report</i>	
1568—J. N. Reisman. Rent for April, 1931.....	21.50	Dr. M. M. Head, chairman, presented the following report:	
1569—Southern Engraving Co. Invoice No. 2628—Cuts for illustrations	18.36	As in the past, I think each Councilor has done his full duty. The membership report is probably not as much as it was in 1930. We have several reasons for this. One is the raise in dues and the other, I am sure, is the general financial condition of Georgia and really all over the United States.	
1570—The C. A. Dahl Co. Floral design for Dr. E. C. Davis	10.00	We had two meetings of the Council. One in August, 1930 and one in February, 1931. Both meetings were well attended. No member of the Council was absent without a legal excuse.	
1571—Cash. Special wires and phone calls charged to account of Drs. Bunce, Landham, and Klugh, March, 1931	16.74	I have written each Councilor two or three times this year to try to keep up the membership. The paid membership of the Medical Association of Georgia last year (1930) was 1,744; this year, 1931, it is around 1,474 to date.	
1572—Western Union Telegraph Co.		I have attended each Councilor meeting and attended the meeting of the Committee on Medical Defense.	

There is one thing in the Constitution and By-Laws that this committee must have changed, or pay all the expenses in defending our members. If you will read Chapter VI, Section 5, of the Constitution and By-Laws you will see that it plainly says, "We are to pay all expenses to defend any member when we think it is a proper case to defend." I would like to have a discussion of this particular part of my report at the proper time.

M. M. HEAD, M.D.,
Chairman, Council.

On motion regularly seconded and carried this report was approved as read.

Reports of Committees

Committee on Scientific Work: Dr. C. W. Roberts, Chairman, presented the following report:

COMMITTEE ON SCIENTIFIC WORK

To the House of Delegates, Medical Association of Georgia:

Your Committee on Scientific Work submits the following report:

The duties of this committee as comprehended by it are concerned with three functions: First, the preparation of the annual scientific program. Second, the initiation and carrying forward of the Annual Health Week. Third, to cooperate with the extension departments of the University of Georgia, Emory University and with the State Board of Health in an Annual Campaign of Post Graduate Instruction.

The program which is before you represents the report of the Committee with respect to its first duty.

With regard to Health Education Week your Committee called a meeting March 28, 1931 attended by Officers, Councilors, the Committees on Public Policy and Legislation and Scientific Work, with representatives from the State Board of Health and from the Woman's Auxiliary, to consider the matter of Health Education Week for 1931. After hearing many reports from various sections of the State favorable to the campaign for 1930, a resolution was introduced and unanimously passed that a similar campaign be engaged in for 1931. In accordance with this resolution your Committee, under date of March 28, 1931, prepared an outline for the campaign placing the responsibility for its conduct in the various counties on the Presidents of the various county units and set up the following objectives which represented a resume of the points covered and approved at the meeting above referred to.

The objectives which have been selected for this year are as follows:

The further development of health consciousness among the people of our State so as to (a) secure annual examinations of apparently healthy people; (b) to stimulate interest and teach necessity of co-operation with health authorities in the prevention and control of infectious diseases; (c) to teach the doctrine that work efficiency in this modern, economic age depends upon a reordered life with respect to work habits, exercise, sleep, diet, mental and physical activities; (d) to demonstrate the value of the annual physical examination by offering throughout the period of the campaign free examinations to all who present themselves for it at the offices of any member of the Medical Association of Georgia.

To further these objectives it is suggested that (a) announcements covering the main points to be stressed and the necessity thereof be made in all churches on April 26th either by the minister or a delegated member of the local society; (b) that one or more public meetings be held at which subjects appropriate to the particular community be discussed; (c) that schools be furnished health speakers; (d) that all Civic Clubs, Parent-Teacher organizations and similar bodies be requested to call special meetings where necessary and participate by including in their programs speakers to deal with public health topics; (e) that where available broadcasting stations be furnished speakers and movie theaters exhibit health reels.

It is further agreed that we announce our desire to have the active co-operation of the State Dental Association which contributed such excellent service last year and that we solicit the support of any and all agencies, whether or not mentioned by name and have as a part of their objectives, the improving of the physical, moral and mental status of our citizenship.

Finally, there has been set up in the headquarters of the State Board of Health, State Capitol, Atlanta, an office to act as a clearing house for suggestions, to

furnish information from which speakers may compile data to be used in filling engagements and to supply special speakers when desired.

Last year's campaign was productive of untold results to our people. This year's results should show a marked advance over that of the past but will depend upon the earnestness of purpose with which each county unit approaches the task which challenges us."

Your Committee is not prepared to give an expression at this time as to the value of the campaign but we believe it is fair to assume that the results will again prove to be of such merit as to justify a continuance of this activity.

With respect of your Committees co-operation with the agencies interested in Extension Post Graduate Courses, the Committee attended a meeting held at the Piedmont Hotel with representatives of the University of Georgia, Emory University, the State Board of Health, when a program of activities for the current year, was formulated. At this meeting it was decided to divide the State into six sections and to furnish in these territories a week of intensive Post Graduate Instructions through speakers chosen from the Medical Schools of the University of Georgia and Emory University. The subjects to be considered were carefully selected. The time selected was to run six weeks from June 15th, classes to be held beginning at 2 o'clock in the afternoon and running for some three hours. Strategic points over the State were selected with the idea of furnishing easy access for the physicians in these territories. It seemed desirable that rural physicians particularly be urged to enroll in these courses. Your Committee believes that there is no endeavor in which the Association engages that offers more immediate helpful results than flow from this annual campaign.

Your Committee at the request of the President of the Association attended several meetings called by the Georgia Association of Workers for the Blind, which organization put on a week of public instruction from April 19th to 25th inclusive looking to light conservation in Georgia. The co-operation of the Medical Association of Georgia, in this campaign, was pledged and helpful service was rendered by the members of the Association in various sections of the State. In turn your Committee desires to record its appreciation of a like helpful service in our campaign of Public Health Instruction by the Officers and Committees of the Georgia Association of Workers for the Blind.

Respectfully submitted,

C. W. ROBERTS, M. D., Atlanta, *Chairman*.

SAM P. WISE, M.D., Americus.

G. Y. MOORE, M.D., Cuthbert, *President*.

A. G. FORT, M.D., *President-Elect*.

A. H. BUNCE, M.D., *Secretary-Treasurer*.

Committee on Scientific Work.

Motion carried to adopt the portion of the report of the Committee on Scientific Work which refers to our program, and make this program our order of business of the House of Delegates and our Scientific assembly, with the addition that the House of Delegates may have called meetings as its delegates may wish through the annual session, and that the remainder of the report be referred to the Reference Committee.

Committee on Public Policy and Legislation: Dr. J. W. Palmer, Chairman, presented the following report:

Your Committee met with the Council and with the Committee on Scientific Work once, and we had another meeting on April 22, at which time we adopted the following resolution and recommendations to the House of Delegates:

"WHEREAS, The number of automobile accidents on the highways is showing an alarming increase, and

"WHEREAS, The increasing number of injured persons is taxing both the medical profession, and hospi-

tal facilities to render necessary treatment and care, and "WHEREAS, The persons injured are frequently irresponsible, and without means to pay either for medical aid or hospital services thereby placing an unfair burden on them, therefore

"BE IT RESOLVED: That the Committee on Public Policy and Legislation recommend to the House of Delegates of the Medical Association of Georgia that it sponsor a bill and secure the services of some legislator to introduce same at the next session of the General Assembly of Georgia or support such a measure if introduced at the instigation of the Automobile Association or other organizations to pass some comprehensive measure to make it compulsory for every individual in Georgia to carry liability insurance who may secure a license from the state to operate a motor vehicle within its boundaries.

Motion carried to recommend that the House of Delegates appropriate the sum of Five Hundred Dollars or such part thereof as might be needed for use by the Committee on Public Policy and Legislation to defeat any bill or bills which may be introduced in the coming session of the General Assembly of Georgia that may be detrimental to the medical profession of the state or secure the passage of any bill sponsored by the Legislative Committee.

Respectfully submitted,

J. W. PALMER, *Chairman*.

Dr. Thrash moved that this report be referred to the Council. Motion seconded and carried.

Committee on Arrangements

DR. M. C. PRUITT: I have no report other than to present the program, which shows the work of the local committee on arrangements.

Committee on Medical Defense: Dr. M. A. Clark presented the following report:

Dr. M. A. Clark, Macon, Chairman, gave a report of the activities of the committee during the past fiscal year, showing the number of suits pending at the beginning of the year, number of suits threatened and filed; together with disposition of all suits which had been tried, dismissed by the plaintiff, and those pending. The report showed continuous success in the defense of all alleged claims.

Dr. M. A. Clark and Dr. E. C. Thrash explained the difficulty which the committee meets quite often in an effort to defend a suit for alleged malpractice against a member. Also, the importance of reporting any threat or the filing of a suit to the Secretary-Treasurer of the Association. Do not write letters, make statements or employ an attorney before getting the advice of the attorneys for the Association.

Dr. Clark's report was automatically referred to the Council.

Georgia State Nurses' Association: Miss Jane Van De Vrede, Chairman, presented a report which was published in the July, 1931 issue of *Journal* on page 282.

Committee on Necrology: Dr. M. Hines Roberts presented the following report:

During the past year the Medical Association of Georgia has lost twenty-four of its beloved members. Many of these men were prominent not only in professional life but in civic and social affairs of the state. Their deaths will mean a great loss to our society and to the state at large.

The following is a list of those who have died since the last meeting of this Society in May, 1930:

Anderson, Jesse Monroe, Columbus, Oct. 12, 1930.
Ansley, Wiley S., Decatur, December 4, 1930.
Bates, Jack M., Canton, June 26, 1930.
Brown, M. S., Fort Valley, May 8, 1931.
Davis, Edward C., Atlanta, March 11, 1930.
Dunwoody, John A., Brunswick, November 27, 1930.
Ellis, James N., Atlanta, February 11, 1931.
England, William G., Cedartown, March 26, 1931.

Gibbs, Edward T., Gainesville, July 2, 1930.
Harrison, W. H., Augusta, April 27, 1931.
Jones, William T., Atlanta, March 18, 1931.
Loden, George L., Colbert, February 13, 1931.
Macauley, Hugh A., Waynesboro, February 4, 1931.
Mallicoat, Lester, A., Trion, December 2, 1930.
McCurdy, W. F., Weston, February 6, 1931.
Montfort, Henry L., Dublin, January 5, 1931.
Patterson, Frederick D., Cuthbert, December 21, 1930.

Randle, John H., Covington, November 5, 1930.
Smith, William J., DeSoto, November 8, 1930.
Stapler, Maury M., Macon, December 19, 1930.
Suggs, Clarence E., Barnesville, April 15, 1931.
Summerlin, James A., Pelham, October 7, 1930.
Vinson, S. L., Douglas.
Wahl, Frederick, Savannah, June 28, 1930.
Ward, James A., Cordele, January 10, 1931.
Watts, James C., Rome, February 3, 1931.
Yankey, Worth Edwin, Atlanta, January 10, 1931.

Respectfully submitted,

M. HINES ROBERTS, M.D.,
Chairman.

Committee on the Medical History of Georgia: Dr. E. C. Thrash presented the following report:

REPORT OF COMMITTEE DELEGATED TO COMPILE A MEDICAL HISTORY OF GEORGIA

Your committee has worked arduously since further duties were assigned it at the session of the House of Delegates in 1930. It planned immediately to arrange for a list of patrons to foster and assure the completion of the History. These patrons were asked to pay \$10.00. The names of these are to be printed in the History and a de luxe copy be given them. The House of Delegates and a few others were solicited and many of them subscribed. No State campaign has been launched as yet but an intensive one was immediately instituted with the members of Fulton County Medical Society. Sub-committees were appointed and each member was seen personally. In this way enough has been raised to pay the Historian and some other incidental expenses. Dr. J. P. Corry, of Emory University, has been selected Historian. This appointment was ratified by the House of Delegates last year. He has co-operated with us in every way possible.

A complete history was written, carefully reviewed by each member of the committee, referred back to the Historian and it has been re-written. A second copy has been submitted by the Historian but as yet the committee has not had time to make a review of this copy. The plan is to carefully review this, make such changes, deletions, and additions as it deems wise and then re-submit it to the Historian for editing, after which it will be ready for publication. Arrangements have been made with a solicitor to be present at the desk of the Secretary during the present session. The solicitor is making efforts to obtain as many patrons as is possible, after which a campaign will be put on for regular sales.

Your committee is practically ready for the publication of this book but it cannot go further without instructions from the Council. There are two suggestions that might be considered, one is for the Medical Association of Georgia to under-write the expense of printing and have this money refunded to the Association as subscriptions are paid; or defer the printing of the book until a sufficient number of patrons have subscribed and enough sales made to warrant your committee in taking steps to have the printing done. The first alternative will enable the book to be published immediately while the second would bring about an indefinite delay.

Your Committee asks that the Council either name the price at which the book shall be sold or give it power to act in making this price.

This report was discussed by Dr. Mulherin who

asked what the approximate cost of the book would be.

Doctor Thrash explained that after the entire cost of production was considered they hoped to be able to sell the book for \$5.00 per volume.

Committee on the Crawford W. Long Memorial Prize: Dr. W. R. Dancy, Savannah, submitted the following report:

The Crawford W. Long Memorial Prize Committee, having carefully reviewed and studied the several essays read at the 1930 annual session of the Medical Association of Georgia as tendered in competition for the Crawford W. Long Memorial Prize, submits herewith its report:

Twelve essays, all exhibiting a high type of work, were presented. This number represented one-third of all essays read at the annual meeting of the State Association. The increased interest in this prize is evidently due to the fact that its existence and the conditions governing it are just becoming known, through publicity in the Journal and by the officers of the Association directing attention to it.

The winner of the prize in the 1930 contest was Dr. H. M. Tolleson, Hahira, who wrote an excellent essay on "The Treatment of Hemoglobinuric Fever—Case Report."

Your Committee was very much gratified at the interest in the Crawford W. Long Prize essay contest in 1930 and trust that the 1931 contest will excite the same interest and enthusiasm.

Respectfully submitted,

W. R. DANCY, M. D., *Chairman.*

V. P. SYDENSTRICKER, M.D.

STEWART R. ROBERTS, M.D.

R. V. LAMAR, M.D.

GEORGE W. BACHMANN, M.D.

Advisory Committee to the Woman's Auxiliary: Secretary Bunce read the following report from the Chairman, Dr. B. H. Minchew:

The Advisory Committee to the Woman's Auxiliary has given every assistance possible in the promotion of their program. The Ware County Auxiliary has doubled their assessment toward the State Educational Fund. The Eleventh District Woman's Auxiliary had a delightful program at Valdosta in April, and the Chairman of the Advisory Committee was invited to appear on the program, which he did, and urged the organization of Auxiliaries in every local society and outlined some of the very important things that the Auxiliaries can do in the matter of health education through the Parent-Teacher's Association, Women's Clubs, and in the home. The wives of the physicians of Valdosta expressed a desire to organize, and their request was referred to the proper officials of the State organization. It is my information that all of the Auxiliaries are carrying on some definite program suitable to local conditions. The amount in the Educational Fund this year will be reported by the President, Mrs. C. C. Harrold, of the State organization.

Respectfully submitted,

B. H. MINCHEW, M.D.,

Chairman.

Committee on Group Insurance

DR. J. W. PALMER: Your Committee has had two meetings in Atlanta with insurance companies, and since then we have been asked to investigate the protective insurance. It has been difficult to get much information on that, but the report is in the hands of Dr. Sage, who will present it.

DR. DAN Y. SAGE: We have had numerous meetings, probably fifteen or twenty, and I feel as if I had received a course in insurance in trying to get this ready for you and for the Fulton County Society.

We have two plans, one a ninety year endowment plan, and the other a group insurance plan. In the

group insurance we have what we believe is as good a rate as is available. This insurance policy insures for \$3,000. Everyone who is able to work is insurable at any age up to 60 without an examination. If a man wants it after the age of 60 he must have a partial examination, just enough to show that he is really able to work. The policy that we have for your consideration will pay for total disability, partial disability such as the loss of the use of a hand or foot, the eyes, and so on. Anything that produces total disability will be paid for at \$250.00 a month in monthly installments for twelve months. This policy is in force in the Tennessee State Medical Society and in the local society in Nashville, Tennessee. This plan has the disadvantage of increasing in cost as we grow older, while the cost of the ninety year endowment insurance drops as we grow older.

I move that this matter be referred to the Reference Committee. Motion seconded and carried.

Report of Delegates to the A. M. A.:

Dr. William H. Myers, Savannah, presented the following report:

We, your delegates to the eighty-first annual session of the American Medical Association, held in Detroit, Michigan, June 23, 1930, submit the following brief report of the most important measures adopted, but no attempt is made to fully cover the business transacted, since minutes in full are published in the Journal of the American Medical Association.

The minutes of the Eightieth Annual Session were approved as printed. The annual addresses of the Speaker, the President, the President-Elect were heard by the House and referred to the Reference Committee on Reports of Officers. Reports of the Board of Trustees, of the Secretary, of the Councils, and of other standing committees were submitted to the House and referred to reference committees.

In view of the fact that certain political activities in the House of Delegates had been noted, Dr. E. C. Thrash, of Georgia, introduced a resolution seeking to discountenance and disapprove of sectional caucuses, pertaining to matters to be acted on by the House of Delegates. This was referred to the Reference Committee on Rules and Order of Business.

A resolution was introduced by Dr. C. F. Moll, of Michigan, which has for its purpose reduction of the burden imposed upon the members located in the towns where the meetings of the American Medical Association take place. In order to limit that, he moved that the present custom be terminated and that expenses be curtailed to a minimum. This was referred to the Board of Trustees.

A resolution was introduced by Dr. Edwin B. Heckel, chairman of the Board of Trustees, disapproving of the present management of the Maternal Welfare Department of the Government, and condemning the conduct of the Veterans' Bureau, in freely admitting to hospitals, veterans whose disabilities have no service origin.

Respectfully submitted,

E. C. THRASH,

W. H. MYERS,

O. H. WEAVER,

Delegates.

Report of Fraternal Delegates

SOUTH CAROLINA

Dr. Arthur G. Fort presented the following report:

As "Fraternal Delegates", Dr. Stewart R. Roberts and I visited the South Carolina Medical Association in session at Greenville, S. C., May 5-7, 1931. We were granted all privileges of the Association and were invited to address the Association and the Alumni Association of the Medical College of South Carolina.

I introduced Doctor Roberts, who did justice to the occasion and our Association.

Their program was attractive and instructive and

the President's reception and dance was a most pleasant function.

We were impressed by the fact that their business meeting is held on the evening of the first day and all business affairs disposed of, including election of President-Elect.

It was a pleasant trip.

Respectfully submitted,

A. G. FORT, M.D.,
Fraternal Delegate.

TENNESSEE

Dr. M. M. McCord presented the following report:

I have the honor to submit to you my report as a Fraternal Delegate to the Tennessee Medical Association, which I attended in Knoxville on April 13-14, 1931.

I was introduced to the Association officially on the morning of April 14 by the President of the Association and extended the privileges of the floor on all matters before the body.

There were only about 50 members in attendance on the second day of the convention, but the secretary told me that he expected possibly twenty-five more by the next day, making a total of 275 in attendance out of a membership of about 1,500 in the state.

I noticed that the personnel of the Association was about equal to that of our own Association with the exception that most of the members were from the cities and larger towns of the state. The country doctors, or those from small towns were greater in the minority than we usually see in the Georgia Association. It must be remembered that it is about 500 miles from Memphis to Knoxville, therefore, the convention city in the extreme eastern part of the state made it very inconvenient for many of the physicians in the smaller towns in the western section of Tennessee.

In looking over the official program I was impressed with the fact that the great majority of the papers presented were on surgery, and a comparatively few on internal or general medicine and pediatrics. Possibly the secretary was not successful in getting as many medical men to respond as he desired and as a result was compelled to accept a larger share of subjects pertaining to surgery.

The general meeting embraced the papers on surgery and medicine. There was a sectional meeting by the men on eye, ear, nose and throat diseases, which met at a different place in the hotel, also there was a sectional meeting on railroad surgery by the surgeons of the various railroads.

I only wish that every member of our Association could attend one or more of the neighbor Associations, for that would afford a better opportunity to observe our short-comings as well as our advantages as an Association.

Respectfully submitted,

M. M. McCORD, M.D.

New Business

Dr. W. F. Wells proposed the following amendment to the Constitution:

ARTICLE IX—CONSTITUTION, PROPOSED AMENDMENT

Officers

Section 3. In the second line strike out the phrase, "and without nomination." Following the third line, the last word being, "session", insert, "Nomination for office shall be made orally, but the nominating speech must not exceed two minutes."

Dr. Dan Y. Sage presented a resolution regarding a proposed amendment to the Workmen's Compensation Act.

This matter was referred to the Committee on

Public Policy and Legislation.

Dr. C. C. Aven introduced the following resolution:

Be it resolved that the Medical Association of Georgia adopt the following extract from the report of the

Reference Committee of the American Medical Association

(Extract of Report of Reference Committee of the A. M. A.)

Relations of Physicians to Hospitals

Your reference committee compliment the President-Elect on his lucid, logical and comprehensive exposition of the question of the relationship of the physician to the hospital, and, after a careful consideration of the conclusions enunciated, the committee feels that it should incorporate them in this report. They are as follows:

(a) The physician is no more obligated to provide for the care of the indigent sick than his fellow citizen.

(b) In mutual charitable undertakings for the care of the sick, each citizen contributes what he has; the laymen, physical necessities; the physician, professional skill. But each has a right to protect himself from exploitation, and to judge of the merit of the recipients of his bounty.

(c) When a hospital offers its facilities to a mixed clientele, pay, part pay and pauper, the distinction between the sources of those facilities should be clearly recognized. The physical equipment and service is of general public origin, and their uses may be sold or given away in the discretion of lay boards; but the professional facilities are, and always must be, the contribution of the medical staff as individuals and cannot become in any sense the property of the institution.

(d) When a hospital is owned and operated by government, and supported by taxation, to which the medical profession contributes its due proportion, medical attendance should be paid for by taxation, along with all the other facilities supplied by the institution.

(e) No hospital instituted and supported by public philanthropy or community co-operation of any kind should be permitted to increase its revenues, and so reduce its financial burden on the public, by any system of collecting fees for medical attendance, and thus engaging in the corporate practice of medicine.

(f) The membership of the Association should be guided by these principles in accepting posts on the staff of hospitals and should refuse to support by the contribution of their services, or by the reference of their patients, any institution violating them.

Doctor Aven moved the adoption of this resolution. Motion seconded.

Discussed by Doctors Allen, Aven, Ridley, and Bunce.

Dr. E. C. Thrash offered an amendment that the matter be referred to the Reference Committee for report.

DR. M. A. CLARK: Up to two years ago we had a Committee on Public Health and Legislation and a Committee on Medical Education, then it was decided by this body that the Committee on Public Policy and Legislation should handle all such questions that came before this body. It seems to me the question before us now is very important and should not be acted upon precipitately. If there ever is a need for a Committee on Public Policy and Legislation it is for just such matters as this. After receiving their report proper action can be taken by the House of Delegates.

Dr. Clark offered as a substitute motion that this matter be referred to the Committee on Public Policy and Legislation.

Motion seconded and carried.

Paul Fitzsimmons Eve Memorial

Secretary Bunce read the following letter from Dr. W. H. Goodrich, Dean of the Medical Department of the University of Georgia:

Augusta, Ga., May 7, 1931.

I am enclosing clipping from the Augusta Chronicle of May 2nd, in reference to the dedication of the Paul Fitzsimmons Eve Memorial in Augusta, November 14, 1931, commemorating the services of Doctor Eve on the one hundredth anniversary of the Polish fight for liberty in 1831, memorial exercises are to be held in Poland and by the Polish Societies in the United States.

Besides being one of the founders of the Medical Department of the University of Georgia, Doctor Eve was a distinguished surgeon and writer, and was given high rank in the Polish army. Doctor Eve was also the president of the American Medical Association in 1857.

It seems to me that the Medical Association of Georgia should take part in this celebration, and I am writing to ask your assistance in putting this properly before the Association next week. Will you see that this data is put in the hands of the proper committee and advise me if there is anything further that I can do in the matter.

I am also enclosing a short sketch of the life of Doctor Eve which was obtained from the Polish Government.

With kind regards, I am,

Very truly yours,

W. H. GOODRICH, M.D.,

Dean of the Medical Department of the University of Georgia.

Doctor Bunce announced that the American Medical Association had already decided to participate in the memorial services in Augusta, and would send a representative there.

On motion regularly carried this matter was referred to the Reference Committee.

Secretary Bunce introduced a resolution from Dr. R. M. Harbin, Rome.

This matter was referred to the Committee on Public Policy and Legislation.

Secretary Bunce introduced a resolution from the Ware County Society at Waycross, in reference to the care of persons injured in automobile accidents.

This matter was referred to the Committee on Public Policy and Legislation.

Secretary Bunce presented a letter from Dr. Eugene E. Murphy, Augusta.

This letter was referred to the Committee on Public Policy and Legislation.

Secretary Bunce presented a communication from the Board of Arbiters of the Fulton County Medical Society.

This matter was referred to the Council for action.

Dr. Arthur G. Fort moved that the House of Delegates adjourn to reconvene at 8:00 p.m.

Motion seconded and the House of Delegates adjourned at 5:15 to reconvene at 8 p.m.

SECOND MEETING

Tuesday, May 12, 1931

The adjourned meeting of the House of Delegates was called to order at 8:25 p.m. by the President, Dr. G. Y. Moore, Cuthbert.

Roll Call

The Secretary stated that he had the signed roll of the following twenty-seven Delegates and Councilors, and moved that this constitute the roll call for this meeting:

Charles Adams, Crisp County.

A. S. M. Coleman, Councilor 12th District.

O. W. Roberts, Councilor 4th District.

E. H. Lamb, Habersham County.

C. C. Aven, Fulton County.

S. T. R. Revell, Jefferson County.

J. A. Redfearn, Councilor 2nd District.

E. S. Peacock, Washington County.

A. G. Fort, President-Elect.

E. C. Thrash, Councilor 5th District.

J. O. Elrod, Forsyth County.

J. B. Kay, Bibb County.

T. C. Davison, Fulton County.

W. A. Mulherin, Augusta, (Ex-President).

M. M. McCord, Councilor 7th District.

W. F. Wells, Fulton County.

M. M. Head, Councilor 6th District.

J. C. Patterson, Councilor 3rd District.

W. H. Myers, Councilor 1st District.

C. L. Ayers, Councilor 9th District.

M. A. Clark, Macon (Parliamentarian).

J. W. Palmer, Montgomery County.

J. W. Simmons, Glynn County.

J. G. Dean, Ex-President.

A. W. Davis, Warren County.

C. L. Ridley, Bibb County.

S. P. Kenyon, Terrell County.

President Moore and Secretary Bunce.

The motion to accept the roll call was regularly seconded and carried and the President declared the House of Delegates duly constituted for the transaction of business.

Reports of Committees

Cancer Commission: Dr. J. L. Campbell presented the following report:

Mr. President and Gentlemen of the House of Delegates:

I am glad to report that at the last meeting of our Commission, held this afternoon, they were very enthusiastic in regard to the plans for a state-wide campaign in regard to carrying out certain recommendations we are making in the formal report.

Since the last meeting of the Association the members of the Commission have done some good work and report several county society meetings devoted to the subject of cancer and numerous radio talks on the subject. Among the public health articles which have been prepared for publication by the Fulton County Medical Society, cancer has received full attention. Your chairman has also prepared a series of seven articles dealing with the activities of the State Association in the matter of cancer control, outlining early symptoms and urging health examinations. These articles are being distributed through the courtesy of Dr. T. F. Abercrombie, Commissioner of Health.

Since Dr. Robert B. Greenough's report appeared in the November issue of *Surgery, Gynecology and Obstetrics* your chairman has tried to arouse an interest in the organization in general hospitals of clinics devoted to the diagnosis and treatment of malignant disease. Such a clinic is in active operation in connection with the University Hospital in Augusta, and for several years past a department of the Archbold Memorial Hospital in Thomasville has been devoted to this work. In Rome, the Harbin Hospital, using the radium furnished by the Cooper Radium Fund, has been conducting a splendid campaign of education, especially in the Seventh District. Dr. Harbin has assured me that the doctors of Rome will be requested to co-operate in establishing a more extensive clinic for diagnosis and treatment. We also have assurance that an effort will be made to start a center in Savannah. Athens, Albany, and Macon, with other of the larger cities, could well afford to participate in the movement. Such clinics would be of great educational value to the profession, as well as a help toward relieving those suffering with this dread disease.

We are now endeavoring to perfect a plan of co-operation with the Board of Health to conduct an

intensive campaign of education, much the same as that being done to locate early cases of tuberculosis. Briefly, the idea is to request the Legislature to increase its appropriation to the Board of Health, so that an extension course, as it were, can be put on with a nurse and a field operator to visit the different localities and search out early cases, make a provisional diagnostic report to the family medical adviser and urge that prompt action be taken to send the case at once to an approved center for more definite diagnosis and treatment.

Your chairman was recently informed by Dr. Max Cutler that the Cancer Commission of the American College of Surgeons considers a plant with a good laboratory—200 mgs. of radium and a deep therapy x-ray machine, if manned by a well trained operator and backed up by a competent surgeon and pathologist—sufficiently equipped to give adequate care to all ordinary cases of malignant disease. Cases presenting unusual features could be referred to centers more elaborately equipped. A follow-up system, one of the most important features in the treatment of this class of cases, could be carried out by the Board of Health's proposed extension service.

We hope that the medical profession of Georgia will endorse the proposed plan of our Board of Health and organize clinics in strategic centers where at least preliminary diagnosis can be made and patients referred back to their family physician for professional care or final advice as to the best place and plan of treatment.

Respectfully submitted,
J. L. CAMPBELL, M.D.,
Chairman.

Doctor Thrash moved the adoption of this report. Motion seconded by Doctor Mulherin and carried.

Report of Abner Wellborn Calhoun Lectureship:
Dr. James E. Paullin presented the following report:
Mr. President and Members of the House of Delegates:

It is with the greatest of pleasure that the Abner Wellborn Calhoun Lectureship Committee announces as its fourth speaker to appear before the Medical Association of Georgia, Dr. James Bryan Herrick, Emeritus Professor of Medicine, Rush Medical College, Chicago, Illinois.

As you will note from the report of the treasurer of this fund, the original capital during the past year has been impaired \$34.96. This occurred as a result of defraying the expenses of the last speaker before the Association. Previous to the last meeting, no deficit had occurred in the funds because certain friends of the committee had gladly paid the deficit in order that no impairment would occur in the fixed assets. The interest received from the endowment is not at the present time sufficient to meet the necessary expenses in bringing before our Association distinguished men as our guests. The committee feels that this foundation is of sufficient merit to deserve much more hearty support in a financial way from the entire membership of the Association than it has received in the past. This lack of support, we cannot believe, is due to disinterestedness on the part of the profession but we fancy that it is due to inertia of the members in contributing to such a worthy cause. The chairman appears as a rule as chief spokesman and constantly begging money for the enrichment of the endowment fund. We have met with such poor response on the part of the general membership in the past that at the present time we feel that something else must be done in order that the object of this movement should be carried out as we believe every one would wish. Many promises of contributions have been received but unfortunately, so many of these still remain as promises without actual contributions.

May we then be so bold as to ask on the part of

the officers of the Medical Association of Georgia, the Councilors, and House of Delegates, their active and hearty financial support in raising the remainder of the amount necessary to have an endowment fund of at least \$5,000.00. Surely if the purpose for which this lectureship was organized is worth anything at all, it is worth some effort on the part of every one to raise this amount. We feel that \$5,000.00 invested in safe and sound securities will yield about \$200.00 per year which we believe is the minimum amount necessary to enable us to continue with the high ideals and purposes that the Calhoun foundation stands for.

The report of the treasurer is as follows:

Permanent Investment—10 shares of Southwestern Railroad Stock.....	\$1332.50
Balance in Bank, May 13, 1931.....	928.06
Total	\$2260.56

During the past year not one single contribution has been made to this cause.

Respectfully submitted,
JAMES E. PAULLIN, M.D.,
Chairman.

Treasurer's Report—Abner W. Calhoun Lectureship

Balance in bank June, 1930.....	\$963.02
Interest received from bank	
July, 1930	16.74
Interest on Southwestern Railroad stock, July, 1930.....	32.50
	\$1012.26

Disbursements:	
Dr. Lahey—expenses—July, 1930.....	132.00

August, 1930, Balance in bank.....	\$ 880.26
Interest received from bank	
January, 1931.....	15.30
Interest on Southwestern Railroad stock, February, 1931.....	32.50

Balance in bank, May 12, 1931.....	\$ 928.06
F. K. BOLAND, M.D., Treasurer.	

Reference Committee Abolished

Dr. M. T. Benson offered a motion that the House of Delegates rescind the action creating a Reference Committee.

Motion seconded by Dr. M. A. Clark.

Discussed by Doctors Simmons, Thrash, and Sage, following which the motion was put to a standing vote and carried.

Reference Committee Created

Dr. Dan Y. Sage offered the following motion: Immediately after the convening of the annual session the President shall appoint a Reference Committee consisting of five members, whose duty it shall be to consider all matters referred to it by the House of Delegates.

Motion seconded and unanimously carried.

Abner W. Calhoun Lectureship Committee

Doctor Sage stated his motion regarding the appointment of a committee to assist Doctor Paullin in raising the necessary funds for the Abner Wellborn Calhoun Lectureship Fund.

Motion seconded and unanimously carried.

Report of Council

APPROPRIATIONS

Doctor Bunce stated that the Council recommended that the Committee on Medical Defense be granted the usual appropriation of \$3,500.00, or any part thereof that might be necessary, and that the Committee on Public Policy and Legislation be granted the usual appropriation of \$500.00, or any part thereof.

Doctor Elrod moved that these recommendations be complied with. Motion seconded by Doctor Clark and carried.

Doctor Bunce stated that the Council also recommended that the expenses of the invited guests be paid.

Doctor Clark moved that this recommendation be complied with. Motion carried.

Report of Committees

Reference Committee: Dr. T. C. Davison presented the following report, section by section:

Your Committee recommends:

HEALTH EDUCATION WORK

1. That the program as outlined be continued, except that free physical examination be limited to the indigent, and that they be referred as far as possible to the regularly organized clinics.

We move the adoption of this suggestion. Motion seconded and carried.

NURSES' ASSOCIATION

2. That we indorse the suggestion that there be a closer relation between the Nurses' Association and the Medical Association of Georgia. We further recommend that in the future the report from the Georgia State Nurses' Association be made to the Committee on Hospitals, and that a synopsis of this report be incorporated in the report of the Hospital Committee to the House of Delegates.

We move the adoption of this recommendation. Motion seconded and carried.

PAUL FITZSIMMONS EVE MEMORIAL

3. That a Committee of three be appointed by our President, and that with our President and Secretary they attend the dedication of the Paul Fitzsimmons Eve Memorial, in Augusta, as representatives of the Medical Association of Georgia.

We move the adoption of this recommendation. Motion seconded and carried.

GROUP INSURANCE

4. That the Association adopt the group insurance policy as offered by the Life and Casualty Insurance Company of Tennessee.

We move the adoption of this recommendation. Motion seconded.

Discussed by Doctors Benson and Sage, following which the motion to adopt was put to a vote and carried.

Committee on Public Policy and Legislation: Dr. Dan Y. Sage presented the following report:

RELATIONS OF PHYSICIANS TO HOSPITALS

1. Regarding the extracts from the report of the Reference Committee of the American Medical Association, your Committee recommends that this be adopted by the Medical Association of Georgia.

Motion seconded by Dr. M. T. Benson.

Doctor Sage's motion was then put to a vote and carried.

NEW BUSINESS

BY-LAWS

Chapter VI, Section 5—Proposed Amendment

DR. M. A. CLARK: I wish to offer the following amendment in reference to the Committee on Medical Defense.

Section 5, paragraph 2, reads, "It shall be the duty of the Committee on Medical Defense to investigate and defend all damage suits against the members of the Medical Association of Georgia; to investigate all claims of civil malpractice made against its members; to take full charge of such cases which, after investigation, they decide to be proper cases for defense; to defend all such cases in the courts of last resort, and pay all costs of such defense."

I wish to offer the following as an amendment, the paragraph to read, "to defend all such cases in the

courts of last resort, to furnish General Counsel and pay court cost usual to such litigation, and reasonable fees for local attorneys as shall be arranged by General Counsel. Provided, that any member that has indemnity insurance shall have such insurance bear its portion of the expenses."

MEMORIAL SERVICES

Dr. M. A. Clark, Macon, spoke as an individual member and from a point of personal privilege. His remarks were in reference to meeting Dr. Edward C. Davis, deceased; his association, friendship and co-operation during many years of practice and working together as officers of the Association. Doctor Clark suggested an allotment of time for memorial services during each annual session of the Association. The suggestion was discussed by Dr. T. C. Davison and Dr. Howard Hailey, both of Atlanta.

Motion carried to hold Memorial Services annually during the annual session of the Association, and the arrangement of all details to be referred to the Committee on Necrology.

DR. E. S. PEACOCK: We cannot pay too much respect to our honored dead and I will ask those present, in token of their love for and appreciation of Doctor Clark's services, to rise.

Motion seconded and unanimously carried.

DR. M. A. CLARK: Gentlemen, I thank you. You make me work so hard, and just when I get where I think I am perhaps becoming worthy you do something else. I do appreciate it, and during my few remaining years I will try to do my best for you.

Report of Fraternal Delegate

DR. ARTHUR G. FORT: Dr. Stewart Roberts asked me to present for him his report as Delegate to the meeting of the South Carolina Medical Association. If it is in order I will do so at this time.

Doctor Fort then presented the following report:

On Wednesday, May 6, Dr. Arthur Fort, the President-Elect of our Association, and I went to Greenville, S. C., and met with the South Carolina Medical Association. Doctor Lynch, the President, presided.

We were given a very cordial greeting, and were introduced to the meeting and took part in the discussions, and also at the meeting of the Alumni Association of the Medical College of South Carolina.

I was very much impressed with certain methods of the South Carolina Association which were different from ours, and apparently were worth reporting to you.

First, the House of Delegates meets on the night preceding the meeting of the Association, transacts its business promptly and efficiently, and elects all officers for the succeeding year. At the session in Greenville, the House of Delegates had not only completed its business, but elected its officers, and adjourned at 9:00 p.m. The scientific sessions are uninterrupted, and there is nothing left from the time the president calls the Association to order until adjournment, except the scientific work and such social pleasures as are incident to any meeting. Such a method will eliminate the present excessive political activities seen in one of our meetings, and which are exceedingly detrimental to our scientific work.

Second, a Delegation was received from the North Carolina Medical Association relative to the co-operation of the Medical Associations of Virginia, North Carolina and South Carolina in the ownership of one single Medical Journal. The idea was to issue a better Journal by three states than could be issued by any one state and to proportionately lower the cost of publication on any one state. There is much argument in favor of this trend. The New England States, I understand, have united in the publication of the New England Medical Journal and the North Atlantic States in the publication of the Atlantic Medical Journal or some such Journal. With the proper

negotiations initiated by you and by the appointment of a committee, there could probably merge with the Medical Association of Georgia three or four South Atlantic states, such as Alabama, Florida and Tennessee, with some such title as South Atlantic Medical Journal. The expense would be lower and each state would have a full representation in an official organ.

With the tendency toward mergers and better management, it is suggested that consideration of such a plan would probably meet the approval of the Association.

Respectfully submitted,

STEWART R. ROBERTS, M.D.

The President announced that the next meeting of the House of Delegates would be held at 8:00 a.m., Thursday, and on motion regularly carried the House of Delegates adjourned at 9:50 p.m.

THIRD MEETING

Thursday, May 14, 1931

The House of Delegates reconvened and was called to order at 8:10 a.m., by the President, Dr. G. Y. Moore, Cuthbert.

Roll Call

The Secretary stated that he held in his hand the signed roll of the following thirty-six Delegates and Councilors, and moved that this be accepted as the official roll call for this meeting.

L. P. Holmes, Richmond County.
W. H. Myers, Councilor 1st District.
Dan Y. Sage, Fulton County.
M. C. Pruitt, Fulton County.
J. O. Elrod, Monroe County.
M. A. Clark, Macon (Parliamentarian).
M. M. Head, Councilor 6th District.
W. E. Simmons, Bulloch-Candler-Evans Counties.
T. C. Davison, Fulton County.
Arthur G. Fort, President-Elect.
J. P. Turk, Cherokee County.
A. F. White, Butts County.
A. H. Frye, Spalding County.
M. M. Byrd, Troup County.
Howard Hailey, Fulton County.
J. W. Simmons, Glynn County.
W. F. Wells, Fulton County.
J. G. Dean, Ex-President.
L. C. Allen, Jackson County.
J. L. Garrard, Floyd County.
M. T. Benson, Fulton County.
O. W. Roberts, Councilor 4th District.
O. D. King, Carroll County.
W. L. Wilkinson, Decatur-Seminole Counties.
W. M. Cason, Washington County.
S. D. Brown, Franklin County.
J. B. Kay, Bibb County.
C. L. Ridley, Bibb County.
S. T. R. Revell, Jefferson County.
A. C. Shamblin, Bartow County.
J. W. Palmer, Montgomery County.
E. H. Lamb, Habersham County.
J. E. Penland, Ware County.
D. Houseworth, Douglas County.
R. C. Franklin, Emanuel County.
E. B. Davis, Dooly County.
W. E. McCurry, Hart County.
President Moore and Secretary Bunce.

The Secretary stated that Dr. W. M. Cason had been appointed Delegate in place of Dr. E. S. Peacock, who had been called home and that Dr. A. C. Shamblin, of Bartow County, had been appointed to serve in place of Dr. W. E. Wofford.

The motion of the Secretary to accept the roll call was seconded and regularly carried and the President declared the House of Delegates duly constituted for the transaction of business.

Minutes

Secretary Bunce gave a resume of the proceedings of the House of Delegates at the meetings which were held on May 12, and stated that the minutes would be published in full in the Journal.

Dr. M. A. Clark moved the adoption of the minutes. Motion seconded by Dr. W. H. Myers and carried.

REPORT OF THE COUNCIL

DR. M. M. HEAD: In addition to the report which was made at the last meeting of the House of Delegates, the Council recommends that we reduce somewhat the expenses of the Journal of the Medical Association of Georgia. We recommend that the Journal continue to furnish space to the Nurses' Association, and that they pay for the space, as heretofore.

We recommend that the Journal allow the Woman's Auxiliary the usual amount of free space in the Journal.

The Council recommends a change in the plan instituted two years ago, when the House of Delegates voted to pay all of the expenses of the President. During the last two years we have been paying out from \$400.00 to \$600.00, and the Council now recommends that we revert to the former plan of giving the President an honorarium of \$150.00.

The Auditing Committee reported that the books of the Treasurer are correct in all particulars.

The Council recommends that the Association shall not underwrite the publication of the Medical History of Georgia.

Dr. M. C. Pruitt moved that the report be accepted as a whole. Motion seconded and unanimously carried.

DR. M. A. CLARK: It seems to me we are not taking this matter of the History very seriously. We have been working on it for several years. Some of you have very promptly responded by subscribing as a patron, and enough has been obtained to get the material ready for publication. I think we can begin publication certainly by the time we collect \$1,500.00, and I think the book can be sold for \$5.00. Surely all of you will want one at that price. I think the Council wise in recommending that we do not underwrite the sum, but I think it would be well for them to instruct the Committee to proceed as rapidly as possible with the publication of the volume.

DR. S. T. R. REVELL: Any way that we can lend our moral support without obligating ourselves financially I think would be entirely in order. The History Committee has labored long and arduously and has prepared the material for a Medical History of Georgia, and they are entitled to our support, both moral and financial. I agree entirely that it is not advisable at present to attempt to underwrite publication of the book, but I still think we should uphold the hands of the men who have struggled for five years, and I do not see how we can do this unless we agree among ourselves to be either patrons or subscribers. I think it would be well for us to consider this matter seriously.

DR. C. L. RIDLEY: I would like to see this carried through as soon as possible, and therefore move that Doctor Clark announce the exact present status of this matter before the general body this morning, and that the Chairman of the Committee get into communication with the President and Secretary of each County Society, and have them bring the matter before their societies and solicit subscriptions.

Motion seconded and unanimously carried.

UNFINISHED BUSINESS

By-Laws—Amendment Adopted

Dr. M. A. Clark introduced the question of the amendment to Chapter VI, Section 5, Paragraph 2, of the By-Laws, presented at the previous meeting.

Dr. J. O. Elrod moved that this amendment be adopted.

Seconded by Dr. W. H. Myers, and unanimously carried.

NEW BUSINESS

Loving Cup

DR. ARTHUR G. FORT: Governor Hardman called me the other day and said he wished to present to the Association a loving cup, the name of the doctor who has done the greatest piece of work in medicine, surgery or public health, to be engraved on the cup each year and his accomplishment to be engraved beneath the name. The cup is to be kept in the treasury of Georgia and is to be turned over to us each year. We should have some commission or committee to determine which man has accomplished the most in medicine, surgery, or public health. Governor Hardman does not care whether the House of Delegates shall pass on it, or the Council, or a committee. It is up to us to settle this, and I think it would be wise for us to decide this morning how this individual shall be selected.

I move that the Council act as a committee of the whole to choose the member of the Medical Association of Georgia whose name shall appear upon the loving cup to be presented by Governor Hardman.

Motion seconded by Doctor Elrod and unanimously carried.

State Board of Medical Examiners

Dr. T. J. McArthur, Cordele; Dr. J. O. Elrod, Forsyth, and Dr. A. F. White, Flovilla, discussed the law in reference to the necessity of all licensed physicians registering; also, the effort and expense required to make effective the revocation of the license of a doctor, which may be necessary on account of unethical conduct and criminal practice. They asked for the cooperation and help of the members of the Association, stating that their influence was all that was necessary.

Motion carried to refer to the Committee on Public Policy and Legislation.

Loving Cup

DR. M. A. CLARK: I understand that the proposed gift from Governor Hardman is to be made at the banquet this evening. The House of Delegates is the business part of our organization and should authorize the President to accept on the part of the Association this gracious gift from the Governor.

I move that the President of the Medical Association of Georgia be authorized to accept the gift providing a loving cup to be presented at the banquet this evening.

Motion seconded by Dr. T. J. McArthur and unanimously carried.

Dr. Arthur G. Fort requested the privilege of the floor for Dr. Dunbar Roy.

Dr. Dunbar Roy, Atlanta, representing the Section of the Association on Diseases of the Eye, Ear, Nose, and Throat, spoke of the importance of the work and asked for more consideration by the Committee on Scientific Work in preparing the program for the annual sessions each year.

On motion this was referred to the Committee on Scientific Work.

Clinics

Dr. M. L. Boyd moved that a committee be appointed by the President of the Association for the purpose of investigating the possible advantages to the members of the Association which might come from the organization by them of private or group clinics, and that their report be referred to the Council.

Motion seconded and carried.

Minutes

SECRETARY BUNCE: In order that this meeting

may be official, it is necessary to adopt the minutes of what we did this morning. I therefore move that we adopt the minutes of our proceedings this morning, as they will appear in the Journal.

Motion seconded and unanimously carried.

Dr. M. A. Clark moved to adjourn. Motion seconded and the House of Delegates adjourned at 9:10 a.m., *sine die*.

ALLEN H. BUNCE,
Secretary.

MINUTES OF THE COUNCIL

First Meeting

TUESDAY, MAY 12, 1931

The first meeting of the Council of the Eighty-Second Annual Session of the Medical Association of Georgia was called to order at 7:05 p.m., by the Chairman, Dr. M. M. Head, Zebulon.

Secretary Bunce called the roll and the following Councilors, Vice-Councilors, and Officers responded:

C. L. Ayers, Toccoa, Clerk.

W. H. Myers, Savannah, First District.

J. A. Redfearn, Albany, Second District.

J. C. Patterson, Cuthbert, Third District.

O. W. Roberts, Carrollton, Fourth District.

E. C. Thrash, Atlanta, Fifth District.

M. M. Head, Zebulon, Sixth District.

M. M. McCord, Rome, Seventh District.

H. M. Fullilove, Athens, Eighth District.

C. L. Ayers, Toccoa, Ninth District.

H. D. Allen, Jr., Vice Councilor, Milledgeville, Tenth District.

A. S. M. Coleman, Douglas, Eleventh District.

J. Cox Wall, Eastman, Twelfth District.

President Moore, President-Elect Fort, Parliamentarian Clark, and Secretary Bunce.

REPORT OF COUNCILORS

FIRST DISTRICT—Dr. Wm. H. Myers, Savannah.
To the Council of the Medical Association of Georgia:

As Councilor, I submit the following report for the First District:

The condition of the District, as a whole, is not up to normal. Every opportunity has been taken to appear before the County Societies, and numerous letters have been written to the secretaries, as well as members, urging the necessity for prompt payment of dues. Response has not been very good. The Tri-County Society of Liberty, Long and McIntosh had two members in 1930, but thus far no one has been reported from these counties as having paid dues. In fact, letters have been repeatedly written to the last known secretary, but no reply can be gotten from him.

With the financial depression which is general, there seems to be a marked falling off in professional interest. And, several former members have moved out of the State, or to some other section of the State.

In my report for 1930, I reported two "quacks" in the District, one H. A. Boyd, of Savannah, who is notorious for his preposterous advertising in the daily papers; and the other is an unlicensed practitioner, George B. Strange, of Springfield.

There are in Chatham County, quite a few who have not paid their dues, but it is felt that they will, in time, pay; so that Chatham County can, at least, show a very high percentage of eligible practitioners in the Society.

The latest report on paid members compared with 1930 is as follows:

Total membership of the First District in 1930 was 141.

Total to May 1, 1931 was 93.

Membership to this date compares favorably with that of last year at the same date.

Respectfully submitted,

WILLIAM H. MYERS, M.D.,
Councilor.

SECOND DISTRICT—Dr. J. A. Redfearn, Albany.
To the Council of the Medical Association of Georgia:

Conditions in the Second District are quite satisfactory. In 1930 there were 119 paid members. So far this year 119. We have comparatively few members who have not paid their dues. A meeting was held in October in Cairo and in April in Bainbridge. Both meetings were well attended. For the past two years we have had afternoon meetings instead of all day, which has increased the attendance somewhat.

Sincerely yours,

J. A. REDFEARN, M.D.,
Councilor.

THIRD DISTRICT—Dr. J. C. Patterson, Cuthbert.
To the Council of the Medical Association of Georgia:

Conditions of the Third District Medical Association on the whole are very satisfactory. I have been in almost every County in the District and find that most of them are having good attendance at the societies and are taking quite an interest in things medical.

The total paid membership in the Third District in 1930 was 127. Total paid members to May 1, 1931 was 109.

Respectfully submitted,

J. C. PATTERSON, M.D.,
Councilor.

FOURTH DISTRICT—Dr. O. W. Roberts, Carrollton.
To the Council of the Medical Association of Georgia:

We have had one District meeting, and will have another one at Warm Springs, Georgia, on May 28th.

The total membership in the Fourth District in 1930 was 89. Total paid members to May 1, 1931 was 50.

Respectfully submitted,

O. W. ROBERTS, M.D.,
Councilor.

FIFTH DISTRICT—Dr. E. C. Thrash, Atlanta.
To the Council of the Medical Association of Georgia:

On account of the stringency of the times, payments are coming in more slowly than usual. An intensive campaign has been instituted, especially in Fulton County, to stimulate more prompt payment. In doing this the lapsing of the insurance feature since April 1st has been especially stressed. Many delinquents have paid up since this campaign has been started and the condition of the Fifth District is now in much better condition than we feared it might be.

Our total paid members in the Fifth District to May 1, 1931 is more than in former years to the same date.

Respectfully submitted

E. C. THRASH, M.D.,
Councilor.

SIXTH DISTRICT—Dr. M. M. Head, Zebulon.
To the Council of the Medical Association of Georgia:

The Sixth District shows 126 paid members as of May 1st, 1931 and showed 156 paid members in 1930. This is a decrease of thirty members—I feel satisfied that the paid members will in the near future be what they were in 1930—I do not know of a new physician in the Sixth District. We have had only two deaths: Dr. C. E. Suggs, Barnesville, and M. M. Stapler, Macon.

I have written all the Secretaries to keep after the membership. The Sixth District is in good condition

as to membership and professional friendship.

We had two District meetings; one in November in Macon and one in June at Indian Springs. Both meetings were well attended and had very instructive programs.

Respectfully submitted,

M. M. HEAD, M.D.,
Councilor.

SEVENTH DISTRICT—Dr. M. M. McCord, Rome.
To the Council of the Medical Association of Georgia:

During the past year we have been passing through one of the most critical periods in the economic history of our State. There has perhaps been a greater number of unemployed than Georgia has ever had before. Many thousands of men and women who are honest and would pay their bills, have been totally prevented from doing so on account of lack of employment, or else working on short time. Worry and lack of proper food causes more illness among such people than when everything is normal. The responsibility of caring for these unemployed during illness has fallen upon the members of our profession and with little hope of reward, for the reason that the financial conditions have been so acute and so long drawn out that many of those who would pay under ordinary circumstances find themselves so far behind on all of their obligations that bankruptcy is the last resort.

Regardless of financial conditions over the State, I feel that the Seventh District has held its own remarkably well. During 1930 we enrolled in this District 139 members. Up to May the 1st of 1931 we have 118 paid members on the roll. We are only short twenty-one members of last year and I fully believe that before the year is up that our membership will be equally as large as last year.

The Seventh District Medical Society is progressing nicely. We have two meetings a year, viz: 1st Wednesday in April and last Wednesday in September. Our attendance is usually around seventy-five men from the District besides the visitors. There is a great deal of keen interest taken in the District society.

Practically all of the county societies meet regularly each month and have a program either by members of the local society or by visiting physicians.

Respectfully submitted,

M. M. MCCORD,
Councilor.

EIGHTH DISTRICT—Dr. H. M. Fullilove, Athens.
To the Council of the Medical Association of Georgia:

I respectfully submit the following report:

The total paid members in the Eighth District in 1930 was 93. The total paid members to May 1, 1931 was 71. I am satisfied that the members in the district will come in 100 per cent with their dues.

Respectfully submitted,

H. M. FULLILOVE, M.D.,
Councilor.

NINTH DISTRICT—Dr. C. L. Ayers, Toccoa.
To the Council of the Medical Association of Georgia:

The majority of counties in the Ninth District have a County Medical Society. A few of them have regular monthly meetings, while others meet quarterly, or just occasionally.

Since our last State Meeting there have been two District meetings. One in Toccoa in September and one in Gainesville in March. Both of these meetings were well attended and had good scientific programs.

The Woman's Auxiliary was in session at both of these meetings with good programs.

The total membership of the Ninth District for 1930 was 102 members. On May 1, of this year,

(Continued on Page 365)

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA
Devoted to Welfare of Medical Association of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

SEPTEMBER, 1931

THE LIVER AND JAUNDICE

Probably on account of its size, the liver was one of the first organs to attract study. The ancients thought they could foretell the future from the liver of sacrificial animals. In a recent number of the National Geographic Magazine we are told that in Nias, one of the South Sea Islands, the same idea obtains today. The modern American, however, has hardly more idea of the functions of the liver than had the contemporaries of Hippocrates. Every day patients come to the Grady Hospital to demand "liver medicine", and in private practice we constantly hear of "torpid livers". A learned professor in Atlanta, who holds a Ph.D., still complains occasionally of "biliousness", for which he takes calomel to "act" on his liver.

In the middle of the last century Claude Bernard discovered the function of the liver as regards glycogenesis and glycogenolysis. This fundamental discovery was followed by much investigation, but it cannot be said that a great deal of definite knowledge was added until ten years ago. At that time Mann devised a technic for the complete removal of the liver in the experimental animal, and thus opened a new field for the scientific study of hepatic physiology.

One of the most interesting discoveries that Mann and his co-workers have made is that, a few hours after the loss of the liver, the dog dies of hypoglycemia, but if glucose is supplied intravenously at frequent intervals he may be kept alive for twenty-four hours or longer. Workers at Vanderbilt have shown that after the administration of poisons having a specific effect on the liver, dogs may be brought back to health if calcium is given with the glucose.

In the course of experimental work it was soon learned that when obstructive jaundice

was brought about, the dog could be kept in a fair state of health for an indefinite period, even after resection of the greater part of the liver, on a diet of milk and corn-syrup; but, when meat was added to the diet, tremendous ascites developed in a short time. If the dog continued to eat meat, he soon died, but, if meat was withdrawn, the ascites would gradually subside.

Another observation of profound importance is that bile-pigment is formed in the reticulo-endothelial system of the bone-marrow and spleen (and, to an insignificant extent, of the liver), to be excreted by the liver. The role of the liver in such matters as the formation of urea, the destruction of uric acid, the deamination of amino-acids, the synthesis of cholesterol, lecithin and fibrinogen, and the detoxification of certain exogenous and, perhaps, endogenous poisons, can only be mentioned.

"By a sort of intuition which it is now difficult to explain", as Dr. C. H. Mayo recently said, "the old Greeks associated jaundice with disease of the liver." And jaundice remains the most common and conspicuous sign of dysfunction of the liver. From the experimental work, it may be learned that the proper diet for a jaundiced patient is one of milk and sugar. If the patient's condition is not grave, it is easy to keep him for some days on a diet of milk, rice, potatoes, fruits, and syrup. In many cases the pigmentation will clear up rapidly with no other treatment. When the jaundice has developed following the administration of arsphenamine or other hepatotoxins, the intravenous use of freshly prepared sodium thiosulphate is helpful.

Not all cases are so simple. In a recent statistical paper (450 cases) it has been stated that in approximately 7 per cent of jaundiced patients, icterus was of the hemolytic type. In 23 per cent, the lesion was within the liver and in the remaining 70 per cent obstructive lesions of the hepatic or common bile ducts were present. Carcinoma accounted for about 25 per cent of the cases; of these, malignancy of the pancreas was the most common single cause, and tumors of the gall-bladder and bile ducts taken together were about half as common. Stones in the com-

mon bile duct were responsible for about 20 per cent.

Most cases of intermittent and painful obstructive jaundice are of benign origin and there can be little doubt about the advisability of operating on such patients. In many cases, however, it must be admitted that the differential diagnosis in jaundice will tax all the resources of the most skillful physician, and then the scalpel of the surgeon must be utilized to make the diagnosis exact. But even in such cases the surgeon requires the close co-operation of the internist in diminishing the risk of renal or hepatic insufficiency, hemorrhage or anemia.

Particularly to combat the first two dangers, the intravenous use of dextrose is of great value. Indeed its use even before the development of symptoms has been urged. Calcium seems to help in preventing hemorrhage. The irritant action of calcium chloride when it escapes from the vein is only too well known. The introduction of the gluconate seems to mark a real advance in calcium therapy, as this salt causes so little irritation that it may be administered intramuscularly. Yet it must be admitted that calcium does not always prevent serious hemorrhage. In such cases, one must resort to small transfusions, perhaps many of them, preferably from a fasting donor.

From the foregoing data, it may be concluded that, when painless jaundice develops in a patient who has not been receiving arsphenamine, cinchophen, or other liver poisons, catarrhal jaundice is the best bet. The proper treatment of this is to feed the patient on milk and carbohydrates with large amounts of fluid. If the jaundice persists, the tentative diagnosis was probably wrong and every effort should be made to arrive at the correct diagnosis. One should first exclude hemolytic jaundice. Unfortunately cholecystography is worthless in the presence of jaundice, so it is often necessary to resort to exploration. When surgical intervention is necessary, dextrose should be used freely, with such other measures as the internist may think indicated.

L. M. B.

PRELIMINARY REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

DAN Y. SAGE, M.D., *Chairman*

Your committee feels that you are entitled to a hasty preliminary report as this issue goes to press.

No one seems able to say precisely what was done by the Legislature in its last day's session, which was held until after sun-up Sunday morning, August 23rd. It does not require much imagination to visualize the conduct and transactions during the long hours of such a performance.

However, we call your attention to the bill which abolished the Board of Health. This bill actually passed and has probably already been signed by the Governor. It seems that the main changes in the Health Department for the present are:

1. The abolition of the existing Board of Health.
2. The continuance of the present Secretary of the Board as Health Officer for a term of four and one-half years.
3. The privilege of the Health Officer to appoint himself a Board of five to ten if he desires.
4. The placing of the great health institutes at Alto and Gracewood under another Board apart from the Health Department.
5. The Health Officer hereafter to be appointed by the Governor.

These changes were passed presumably to cut expense. A copy of Article III of this bill, as finally passed, follows:

ARTICLE III

Department of Health

"Section 14. Be it enacted by the authority aforesaid that there is hereby created a Department of Public Health under the management and control of a Director to be appointed by the Governor, by and with the advice and consent of the Senate, provided; however, the present incumbent in the office of Secretary of the State Board of Health shall, until January 1, 1936, be the Director of the Department created herein, the Director thereafter to be appointed for a term of four years, and provided further that said Director shall be appointed from a list of Medical Doctors submitted to the Governor by the Medical Association of Georgia containing not less than five names or from the qualified list of Public Health Officers of the Bureau of the Public Health Service of the United States at Washington, D. C.

"Section 15. Said Director shall be a graduate phy-

1. Gay, J. G.: The Effect of Previous Ligation of the Common Duct on Restoration Following Partial Removal of the Liver in Dogs, Arch. Surg. (to be published).

sician authorized to practice medicine and surgery in this State and who shall have had not less than five years' experience in the practice of said profession, and shall receive a salary of six thousand (\$6,000.00) dollars per annum, payable monthly, which said salary shall be in full compensation of all fees, perquisites, and other emoluments whatsoever.

"Section 16. The State Board of Health existing under and by virtue of Sections 1656 and 1657 of the Code of 1910 is hereby abolished and the powers, duties, and functions of said Board are hereby transferred to and vested in the Department of Public Health. However, the Director may appoint not less than five nor more than ten persons to serve at his pleasure, to constitute and be the Advisory Board of Health to the Department of Health, provided that a majority of said Board shall be doctors and that at least one member shall be a dentist, all of whom shall serve without expense or compensation.

"Section 17. The office of State Registrar of Vital Statistics as provided in an Act approved August 17, 1914 (See Acts 1914, page 157, *et seq.*), is hereby abolished and the powers, duties, and functions of said office are hereby transferred to and vested in said Department.

"Section 18. Under the direction and supervision of the Director of this department, it may employ such clerks and assistants as may be provided in an appropriation enacted for the support of said department."

(Effective date, January 1, 1932.)

Although a record vote of the Senators was not taken on the motion to strike that section of the reorganization bill which abolished the State Board of Health, the following fifteen are known by observers to have been among the eighteen Senators who voted for retention of the Board:

Dr. J. O. Strickland, Pembroke, First District.
Elmer E. Dekle, Valdosta, Sixth District.
W. H. Duckworth, Cairo, Seventh District.
F. D. Hand, Pelham, Eighth District.
J. L. Horn, Preston, Twelfth District.
Walter C. Perkins, Millen, Seventeenth District.
Roy V. Harris, Louisville, Eighteenth District.
J. Howard Ennis, Milledgeville, Twentieth District.
Dr. Jeff Davis, Toccoa, Thirty-First District.
J. F. Pruett, Dahlonga, Thirty-Second District.
J. Morgan Nix, Commerce, Thirty-Third District.
Buell Stark, Dalton, Forty-Third District.
James B. Clements, Irwinville, Forty-Fifth District.
L. L. Moore, Moultrie, Forty-Seventh District.
Hamilton McWhorter, Lexington, Fiftieth District.

This list is published without prejudice to the other three who voted in favor of retention of the Board and their names will gladly be added when it can be reasonably established who they are. Efforts to ascertain their names, in the absence of a record vote, have been unavailing.

President W. Cecil Neill, although not called upon to vote, was known to be in favor of retention of the Board and undoubtedly would have voted that way had there been a tie. The final vote was 30 to 18 in favor of abolition of the Board.

The next bill sponsored by your Association, the Hospital Association of Georgia, and other organizations was the one asking an increase in the limitation from \$100 to \$500 on industrial cases. The bill first passed the House Committee and the House with practically no opposition. The Senate Committee, composed at the executive session of only four Senators out of a total membership of twenty-one, voted adversely. When the report came before the Senate itself, amendments were added and the limit was reduced to \$200 and returned to the House. The House Committee restored the amount to \$500 and there the bill stuck.

The Speaker of the House, Hon. Arlie D. Tucker, opened up a sudden opposition and remarked that he wanted the Rules Committee to "throw the bill out of the window". From then on all day and up until daylight Sunday morning efforts were made to get the bill before the Rules Committee. But somehow it would get close to the top of the list and then would be dropped down behind half a dozen other bills. One effort to place the bill on call was actually voted down by the House itself.

We also feel that you are entitled to know how the members voted and worked on this bill. Therefore we are giving you a partial list as furnished us from time to time. If there should be any error, of course, we will be glad to know of it and to acknowledge it. But since we are only giving the names of those who spoke or worked on the floor, we feel certain there is no error.

*Senators Supporting and Assisting on Floor of
Senate—Compensation Increase Bill*

Roy V. Harris, Louisville, and John W. Bennett, Waycross (authors of bill); W. C. Neill, Columbus; W. H. Duckworth, Cairo; Alpha A. Fowler, Douglas; Guy D. Jack, Cochran; Louie E. Jones, Alpharetta; Linton B. West, Cuthbert.

*Senators Opposing and Leading Fight on Floor of
Senate—Compensation Increase Bill*

Joseph H. Cheatham, Griffin; Dr. Jeff Davis, Toccoa; J. O. M. Smith, Commerce; E. M. Williams, Monroe.

*Representatives Supporting and Assisting on Floor of
House—Compensation Increase Bill*

Cartledge-Lanier-Lester, Richmond County (authors of bill), L. Thomas Gillen, Bibb County; H. W. Nelson, Cook County; Harvey J. Kennedy, Lamar

County; Luther Still, Fulton County; Gus A. Hudleston, Meriwether County; J. M. Simmons, Decatur County; W. Glenn Thomas, Wayne County; H. A. Beaman, DeKalb County; Paul Lindsey, DeKalb County; J. Emory Wood, Clarke County; O. R. Hardin, Whitfield County.

Representatives Opposing and Leading Fight on Floor of House—Compensation Increase Bill

Arlie D. Tucker, Speaker of House, Berrien County, who opposed placing bill on calendar; M. U. Mooty, Troup County; W. S. Peebles, Bartow County; Joseph E. Johnston, Cherokee County; W. F. Andrews, Crawford County; R. A. Franklin, Butts County; W. Willis Battle, Muskogee County; B. C. Bland, Stewart County.

Other matters and a more detailed report will be furnished in an early issue.

This committee wishes to thank the many individuals, hospital staffs, and others who have worked hard and faithfully and, above all other motives, honestly, cleanly, and with the good of our State as a whole as an objective.

MINUTES OF THE COUNCIL

(Continued from page 361)

seventy-one members were reported, but several have sent in dues during the last few days. By the end of the year the membership will probably equal that of the last year.

On the whole, medical affairs in the Ninth District are satisfactory.

Respectfully submitted,

C. L. AYERS,
Councillor.

TENTH DISTRICT—Dr. H. D. Allen, Jr., Milledgeville.

To the Council of the Medical Association of Georgia:

The total membership for the Tenth District in 1930 was 150. The total paid membership to May 1, 1931 was 103. This is a favorable showing for the district to date.

Respectfully submitted,

H. D. ALLEN, JR.,
Vice-Councillor.

ELEVENTH DISTRICT—Dr. A. S. M. Coleman, Douglas.

To the Council of the Medical Association of Georgia:

The Eleventh District, on May 1st of this year, showed a membership of eighty-seven compared with 101 same time last year.

My home county shows the greatest decrease in membership which I think is due to the lack of banking facilities. I have seen these men personally and have had promises that they would affiliate at an early date.

I think on the whole, considering the conditions and the troubles we have had, that this is a fairly good report. I hope as times improve we can get the men who are out to come back into the fold.

We have had two District meetings, the last one in Valdosta a month ago. It was very interesting and instructive and I think we had the largest attendance we have had in a number of years.

Respectfully submitted,

A. S. M. COLEMAN, M.D.,
Councillor.

TWELFTH DISTRICT—Dr. J. Cox Wall, Eastman.
To the Council of the Medical Association of Georgia:

Membership for my District at this time is about the same as last year but regret to report that we did not have our regular winter meeting due to influenza and illness in the profession.

I had a call meeting of the Emanuel County Society July last, this was due to an advertisement that appeared in The Swainsboro paper by Dr. D. D. Smith, this was a notice of an A. and T. clinic to be held at the Franklin Hospital and so worded as to appear irregular, a copy was mailed to Dr. Bunce by Dr. C. Thompson, Millen, it being brought to his attention by a minister at a luncheon with the remark, "The way you doctors advertise," this was done in the best of spirit and friendship by Dr. Thompson and was so stated at the meeting which was fully attended by all members and my Vice-Councillor, Dr. Edmonson, Dr. D. D. Smith stated the motive of the notice and presented an affidavit from the editor of the paper stating that he worded the notice and received no pay for same. A motion was made and carried absolving Dr. D. D. Smith of any irregularity, which received the approval of the Councillor and Vice-Councillor.

Respectfully submitted,

J. COX WALL,
Councillor.

Appropriations

Secretary Bunce stated that the Committee on Medical Defense requested the usual appropriation of \$3,500.00, or as much thereof as may be necessary, for their work during the coming year.

Dr. McCord moved that the Council recommend the appropriation of this amount.

Motion seconded by Dr. Myers and unanimously carried.

Dr. Bunce stated that the Committee on Public Policy and Legislation made two requests for money. The first for \$500.00, or any part thereof that may be needed to carry on their work.

Dr. Myers moved that the Council recommend that this amount be granted.

Motion seconded by Dr. Fullilove and carried.

Expenses of Visiting Guests

THE SECRETARY: The expenses of one of our guests this year will be paid by the Abner Wellborn Calhoun Lectureship, and the expenses of Dr. Morgan will be paid by the American Medical Association. That leaves the expenses of only one guest, Dr. Rosser, and possibly we may have to assist the Lectureship in paying Dr. Herrick's expenses.

Dr. Fullilove moved that the Council recommend that the necessary amount be appropriated to meet these expenses.

Motion seconded by Dr. Thrash and carried.

Communication

THE SECRETARY: We have a communication from the Fulton County Medical Society, but it is not in a condition to be presented at this time. I would suggest that a committee be appointed to consider it and report at our next meeting.

The Chairman appointed a committee consisting of Drs. Fullilove, Ayers, and Myers, with Dr. Clark's advice, to consider this communication and report at the next meeting.

Appointment of Auditing Committee

Chairman Head appointed an Auditing Committee consisting of Dr. C. L. Ayers, Dr. W. H. Myers and Dr. J. C. Wall, and requested them to audit the books of the Secretary-Treasurer and report at the next meeting of the Council.

DR. REDFEARN: There has been some talk about rearranging the councillor districts. I wish to know whether this will have any effect on the councillors.

DR. CLARK: At first flush, I should think it

would be wise to continue as you are, but this can be taken under consideration and the Council can make recommendations.

Adjournment

Upon motion of Dr. Redfearn regularly seconded and carried, the Council adjourned at 8:30 p.m. to reconvene at 9:00 a.m., Wednesday.

SECOND MEETING

Wednesday, May 13, 1931

The Councilor met and was called to order at 9:15 a.m., by the Chairman, Dr. M. M. Head, Zebulon.

Roll Call

Secretary Bunce called the roll and the following Councilors, Vice-Councilors and Officers responded:

William H. Myers, Savannah, First District.

J. A. Redfearn, Albany, Second District.

J. C. Patterson, Cuthbert, Third District.

E. C. Thrash, Atlanta, Fifth District.

M. M. Head, Zebulon, Sixth District.

M. M. McCord, Rome, Seventh District.

H. M. Fullilove, Athens, Eighth District.

C. L. Ayers, Toccoa, Ninth District.

A. S. M. Coleman, Douglas, Eleventh District.

J. Cox Wall, Eastman, Twelfth District.

President Moore, President-Elect Fort, Parliamentarian Clark, and Secretary Bunce.

Report of Committee On Fulton County Matter

Dr. Fullilove, Chairman, presented the following report:

Your Committee feels that this is not a matter for the consideration of the Council. It is entirely for the Fulton County Society to take care of.

Dr. Thrash moved the adoption of this report. Motion seconded and unanimously carried.

Report of Auditing Committee

Dr. William H. Myers, Chairman, presented the following report:

We, your Auditing Committee, have examined the books of the Secretary-Treasurer and find them properly kept and correct.

While making this examination we made an effort to learn of any means of cutting expenses and promoting efficiency. We make the following recommendations solely for the purpose of promoting economy.

1. That the Woman's Auxiliary be given space in the Journal as in the past, which is complimentary.

2. That the Nurses' Association of Georgia be supplied space as heretofore, and that they continue to pay for same.

3. That the Publication Committee be requested to get strongly competitive bids for publication of the Journal.

4. That we revert to the former custom of giving the President an honorarium of \$150.00, instead of paying his expenses, as at present.

Respectfully submitted.

WILLIAM H. MYERS,
Chairman.

C. L. AYERS,
J. COX WALL.

Dr. Myers moved the adoption of this report. Motion seconded by Dr. Fullilove.

Discussed by Dr. Thrash and Dr. Head.

DR. MYERS: The Committee in making this recommendation did so solely in the interest of the Association. We believe that the man who is made President receives an honor which is not to be under-

estimated, and the Association is not financially able to pay all of the expenses while the President travels over the State. So far as I know this has been the custom only during the last two years and I do not know how much improvement has been brought about by it. I think the efficiency of our organization has not been greatly increased, and we do not feel that at present this expense is warranted.

Dr. Myers' motion to adopt the report was put to a vote and unanimously carried.

Unfinished Business

On motion regularly seconded and carried the Council adjourned at 9:50 a.m., to meet at the call of the Chairman.

THIRD MEETING

Friday, May 15, 1931

The Council met immediately after adjournment of the last general meeting and was called to order at 1:50 p.m. by the Chairman, M. M. Head, Zebulon.

Roll Call

Secretary Bunce called the roll and the following Councilors, Vice-Councilors, and Officers responded:

William H. Myers, Savannah, First District.

J. A. Redfearn, Albany, Second District.

J. C. Patterson, Cuthbert, Third District.

O. W. Roberts, Carrollton, Fourth District.

E. C. Thrash, Atlanta, Fifth District.

W. A. Selman, Atlanta, Fifth District.

M. M. Head, Zebulon, Sixth District.

M. M. McCord, Rome, Seventh District.

H. M. Fullilove, Athens, Eighth District.

C. L. Ayers, Toccoa, Ninth District.

A. S. M. Coleman, Douglas, Eleventh District.

J. Cox Wall, Eastman, Twelfth District.

President Fort, Ex-President Moore, Parliamentarian Clark and Secretary Bunce.

Election of Officers

Dr. Myers nominated Dr. C. L. Ayers for Chairman of the Council. Nomination seconded and Dr. Ayers was unanimously elected.

Dr. Head asked the Parliamentarian for a ruling concerning his position as Councilor.

Dr. Clark stated that there was no rule to prevent Dr. Head's serving both as President-Elect of the Association and as Councilor, and that he would retain his position as Councilor until his successor was appointed by the President.

Dr. Myers nominated Dr. M. M. McCord for Clerk of the Council.

Nomination seconded and Dr. McCord was unanimously elected.

Secretary Bunce announced that Dr. Lattimore had suggested that the Council recommend that the Medical Association of Georgia donate a specified sum to the County Society entertaining the Association each year.

DR. MYERS: Inasmuch as the Chatham County Society will be the next to entertain this Association, I move that this be received as information only. Motion seconded.

DR. BUNCE: In justice to Dr. Lattimore I wish to explain that he specifically requested that this not be done next year, but he thought it would be a good plan to put in force thereafter.

Dr. Myers' motion was put to a vote and unanimously carried.

Dr. Myers moved to adjourn. Motion seconded and the Council was declared adjourned at 2:10 p.m., *sine die*.

ALLEN H. BUNCE, M.D.,
Secretary.

GEORGIA STATE NURSES ASSOCIATION

Officers

President—Miss Lucia Massee, R. N., Cuthbert
 First Vice-President—Miss Dora A. Kershner, R. N., Macon.
 Second Vice-President—Mrs. Mae M. Jones, R. N., Milledgeville.
 Secretary—Miss Winnie B. Wood, R. N., Macon.
 Treasurer—Miss Jane Van De Vrede, R. N., Atlanta.
 Miss Jane Van De Vrede, R. N.
 Executive Secretary

District Presidents

First—Mrs. Dorothy Treacle, R. N., Savannah.
 Fourth—Miss Eva Chalkley, R. N., Columbus.
 Fifth—Mrs. Sue B. Paille, R. N., Atlanta.
 Sixth—Miss Dora A. Kershner, R. N., Macon.
 Seventh—Miss Shirley Hamrick, R. N., Cedartown.
 Eighth—Mrs. W. C. Thurmond, R. N., Athens.
 Ninth—Miss Ruby Falls, R. N., Gainesville.
 Tenth—Mrs. Joseph Akerman, R. N., Augusta.

Headquarters

131 Forrest Avenue, N. E., Atlanta.

THE PRESIDENT LOOKS AT NURSING

Among the things for which 1930 and 1931 will go down in History is "The White House Conference", called by the President of the United States, Mr. Herbert Hoover, to review the findings of one hundred or more committees contributing to the information and making recommendations regarding all phases of Child Health and Protection. The Committee, or Section on Medical Service, in regard to the Status of Nursing published the following as a supplement to the United States Daily of April 6, 1931:

"Summary—The official proceedings of the section on Medical Service of the White House Committee on Child Health and Protection, present the status of the work of midwives, obstetrical nurses and nursing attendants. It shows the inadequacy of their training and suggests means for improvement of each, as follows:

1. Deals with Midwives.
2. Nurses. The inadequate preliminary education frequently found among nurses limits their ability to profit by the technical instruction provided in their fundamental courses. Staff training is recommended to both teachers and nurses; also "Refresher Courses" to enable them to "brush up" and "pick up". Specialized training of graduate nurses in obstetrics is recommended since but a small proportion of maternity cases receive hospital attention.
3. Practical Nurses. The practical nurses, or nursing attendants, are employed in such great numbers that their need is recognized. Further study is recommended to determine how to prepare, control, employ, and supervise them.

The following references in the report emphasize the training of midwives, health officers, nurses, etc. References to these are made on Page 24:

Report of Committee C—Nursing Qualifications of Nurses. b. II Preliminary Education

- Low academic preparation a handicap.
- Minimum age of entrance 18.
- Wide divergence in training standards.
- Recent study of grading of Nursing School.
- Of 1929 schools—
 - Seventy-five schools had an average of nineteen.
 - One-fourth had a daily average of less than forty-two patients.
 - One thousand three hundred ninety-five accredited schools reported size of student body.
 - Sixty reported two to nine students.
 - Two hundred forty-one reported ten to nineteen students.
 - One-fourth of all schools had twenty-two, or less, students.
- Nursing organizations of thirty countries—no nursing school or any hospital with less than daily average of one hundred.
- Red Cross requires graduation from hospital with daily average of fifty patients.
- Page 26. Conclusions D. I.
- Poor preparation of nurses, lack of general education on which to base technical training—exploitation of students. Instruction based on daily needs of hospital without regard to future service.
- Page 28.
- Use of Child Development. Centers to give nurses knowledge of normal children.

Committee C—Medical Care of Children

- Page 30.
- Teaching in Children's Hospitals rare.
- Page 40.
- Training entirely inadequate in pediatrics. Only a small percentage of nurses receive training in pediatrics.
- Page 53.
- Recommendations.
- Improve by program of staff education, the nurses teaching and supervising alternately.
- The number of trained attendants seems to indicate a need.

Schools for trained attendants registered in four States.

Fourteen schools—training insufficient and not regulated.

Further study needed to shape minimum standard requirements for these schools.

Some Public Health nurses use working housekeeper. Development of community nursing may solve the problem.

Page 55.

Further study.

Drafting a standard of requirements for preparation of attendants on basis of findings.

Hasty study shows teaching inadequate.

Committee to consider preparation of nurses in foreign countries—preparation of curriculum for post-graduate courses, in certain selected hospitals—and formation of sub-committee to study the best way to prepare, control, employ and supervise attendants, aides, home helpers and practical nurses, "the non-professional home-helps groups".

RELAYED FROM NATIONAL HEADQUARTERS

The Membership Campaign

The Membership Campaign of the American Nurses' Association with the slogan, "100,000 Members by September 2", has proved most successful. At the time of writing, some weeks before the closing date of the Drive, the Membership totalled 103,127 graduate nurses. Announcement will be made in the September issue of the American Journal of Nursing of the increase by states and also of the winners in the contests held in connection with the campaign. It will be October, however, before there can be published the name of the State making the greatest proportionate increase in members during the period of the Drive.

The Next Biennial

The 1932 biennial convention of the Three National Nursing Organizations will be held April 11-15 in San Antonio, Texas. This is much earlier than usual, the date being selected because it is so beautiful in April in this historic city of the Southwest. The September issue of the American Journal of Nursing will give preliminary plans. We call your attention particularly to one plea. The A. N. A. Program Committee asks that nurses from all over the country send to A. N. A. Headquarters their suggestions for the program. A biennial convention is the only opportunity we have to talk over our common problems as nurses in the United States. Therefore, if you have in mind some subject which you feel needs particular attention, won't you please write to A. N. A.

Headquarters and give the Program Committee the benefit of your suggestions?

Invitations for the 1934 biennial convention should be received at National Headquarters before January 1, 1932. In 1928 the rule was established by the Joint Board of Directors that all invitations must be received three months in advance of the convention at which they are to be considered. This enables Headquarters to make advance visits to these cities to collect the necessary information to place before the House of Delegates.

Saunders Medal

The third award of the Walter Burns Saunders Memorial Medal for "distinguished service in the cause of nursing", will be made in April of next year during the convention in San Antonio. Rules concerning eligibility have been published in various national health organs and are available also at A. N. A. Headquarters.

Any individual may submit a name. Send to State Nursing Headquarters for the regulations.

COMMUNICATIONS

MEDICOLEGAL PROBLEMS

To the Editor:

At a meeting of the Board of Trustees of the American Medical Association, held June 7, 1931, a report was submitted by the Committee on Medico-legal Problems of the American Medical Association, urging the establishment of a criminologic institute in each State not already provided with such an agency for the detection and punishment of crime. The recommendation of the committee was approved by the Board. I bring this matter to your attention in the hope that the Medical Association of Georgia will take action in support of this movement and will endeavor to bring about the establishment of such an institute in the State of Georgia.

I enclose herewith an extract from the committee's report showing the reasons for the establishment of criminologic institutes throughout the country. The committee from which this recommendation emanated consists of Dr. H. Douglas Singer, of Chicago; Dr. Winfred Overholser, of Boston; Dr. William C. Woodward, of Chicago; Dr. Ludvig Hektoen, of Chicago, and Dr. William J. Stapleton, Jr., of Detroit.

If the Bureau of Legal Medicine and Legislation or the committee can be of service to you in connection with any movement toward the end named, I hope you will call on me.

WM. C. WOODWARD, M.D.,

Director, Bureau of Legal Medicine and Legislation, A. M. A.

Chicago, Ill., Aug. 14, 1931.

TREATMENT OF TUBERCULOSIS

To the Editor:

I am inclosing a paper in the interest of humanity and ask that it be published in the Journal of the Medical Association of Georgia. I am coming with all the tubercular people of the world and lay them down at your feet and ask if you will not publish this paper for their sake. If I had not had case after case for years and have used over a hundred thousand tablets as described in the paper, and tried many other aromatic tablets from the best houses in America and found they do not agree with the stomachs of the patients, I would never have mentioned the source and kind of tablets I have been using. So far as my trials have gone none of them will do what these described will do. There seems to be something other than the sodium salicylate that causes the stomach to tolerate and improve on their use. Something in the tablet seems to stimulate the gastric glands and cause them to function better. I do not know what it is, but it seems to be there, and in the interest of a great army of suffering and pleading humanity I beg that you lay aside ethics so you can hear the cry of the great multitude of sufferers for help. I would do that for your wife, mother, daughter, sister, brother, father, friend. Will you not do that for mine? Yes, I know you will.

A. A. BARGE, M.D.

Newnan, Ga., Aug. 12, 1931.

The article follows:

A BOON FOR TUBERCULAR PATIENTS

A. A. BARGE, M.D.

Newnan

Ten years ago I delivered a son for a tubercular mother whom I thought would die before she could wean her baby. She was extremely undernourished and said everything she ate nearly killed her and she wished I would give her something to help her. I gave her some five-grain tablets of sodium salicylate aromatic (Griggs), with instructions to take one tablet followed by a glass of water after each meal. A few days later she stated she could eat anything and it would not hurt her. Her food was of the poorest quality and not properly cooked. Occasionally she got a raw egg and sweet milk, but not often. She nursed her child and did her cooking and housework and improved every day. Looked better and felt better for over eight years, although she gave birth to three other children and nursed them at her breast and did her own work as before. She never missed a meal, so far as I could learn, that she did not take the tablet followed by a glass of

water. For the pains in her chest and abdomen I had her rub the painful parts three or four times a day with tincture green soap, U. S. P., 1880, which contains 33 per cent alcohol, until pains were relieved. It certainly relieves the pain.

It has been my pleasure to see numbers of tubercular patients relieved of indigestion and their health much improved by the use of the above tablets after meals and the above liniment to relieve the pains. Tubercular patients are prone to infection of the gallbladder from a sluggish liver and consequently inspissated bile. The salicylate increases the flow of bile, liquefying it and at the same time exercising an antiseptic power in the increased bile, which by continuous use relieves the cholecystitis.

No better remedy in my hands has been found for colic, belching and hiccough, and asthma from overeating than two of the above tablets followed by a glassful of water. If the patient complains of his stomach burning after taking the tablet, tell him to drink another glass of water.

Reader, try this on yourself, try it on your tubercular patients, and on all cases of indigestion, and you will be convinced. Not only that, you will never go to a barbecue without these tablets in your pocket.

If your tubercular patient is nervous, do not give opiates or mixed bromides, but give the patient eight or ten grains bromide of strontium in the glass of water that follows the tablet after meals. When the nervousness is relieved leave off your strontium until the nervousness returns. My reason for using strontium is that it prevents fermentation of food in the stomach, does not in any way disturb the stomach or destroy the appetite; it increases the flow of urine, thereby helping elimination. In dilated stomachs in children nothing in my hands has been its equal in improving this condition.

The Tilden Company, New Lebanon, N. Y., make the above tablets. They do not know that I am writing this paper. The name and source are given that you may know exactly what I have been and am now using and getting such good results with.

ED. NOTE: The above described tablets contain the following:
Sodium Salicylate _____ 3 grs.
Acetanilid _____ 2 grs.
Aromatics and Carminatives _____ q. s.

MASSIVE DOSAGE OF LIVER EXTRACT IN PERNICIOUS ANEMIA

Joseph E. Connery, New York (*Journal A. M. A.*, Aug. 29, 1931), treated six persons with pernicious anemia with single massive doses of liver extract. Hematologic and clinical improvement followed in all cases.

WOMAN'S AUXILIARY

MEDICAL ASSOCIATION OF GEORGIA

OFFICERS

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WHY HAVE AN AUXILIARY?*

MRS. S. T. R. REVELL†
Louisville

The word "Auxiliary" has its derivation from both Latin and French, meaning "help", "aid".

Its definition is: one that aids or helps; an assistant; a confederate. Both subsidiary and auxiliary agree in the idea of furnishing aid, but subsidiary applies subordinate rank or position, an implication which an auxiliary may or may not carry, but it always means more of a co-operating spirit.

Wordsworth says: "Without the exertion of a co-operating power, without this auxiliary impulse, elevated or profound passion cannot exist."

To a thinking body of women there can be no question that aid, help, service are worth while, provided they render assistance to those things that make life better, so the question that naturally arises in considering "Why Have an Auxiliary?" is the worthiness of the object, person, or organization to which or whom we would be an auxiliary.

If we take the words of the Master, "Whoever of you will be the chiefest shall be servant of all," as our standard to estimate value, we think loud would be the voices of all peoples in acclaiming the worthiness of the man of medicine, or of the organization which they form, when united.

In the "Evolution of Modern Medicine", by Osler, we are told that: "Medicine arose out of the primal sympathy of man with man; out of the desire to help those in sorrow, need, and sickness." The medical historian, Doctor Payne, goes so far as to say that: "The basis of medicine is sympathy and the desire to help others, and whatever is done with this end must be called medicine."

Throughout the Hippocratic writings, we find the attitude towards life which is expressed by the phrase, "Where there is love

of humanity there will be love of the profession."

How solemn and great is that oath which has been the "credo" for the profession for twenty-five centuries, in which one promises "With purity and with holiness, I will pass my life and practice my art", and which concludes with these solemn words: "While I continue to keep this oath unviolated, may it be granted to me to enjoy life and the practice of the art, respected by all men, in all ages! But should I trespass and violate this oath, may the reverse be my lot!"

Such a profession calls for God's noblest men, who give freely of themselves to whomsoever needs them. Osler says of them: "While doctors continue to practice medicine with their hearts as well as with their heads, so long will there be a heavy balance in their favor in the Bank of Heaven, not a balance against which we can draw for bread and butter, or taxes, or house rent, but without which we should feel poor indeed."

Who of us can read with dry eyes and a steady voice Ian Maclaren's description of the country doctor? Do you recall the day of his funeral how, in spite of the fury of the terrific snowstorm and snowdrift, that a "hundred men such as for strength and gravity you could hardly have matched in Scotland" made their way to the doctor's humble abode and stood out in picturesque relief against the white background, and how when the minister said: "It's a bitter day, friends, and some of you are old; perhaps it might be wise to cover your heads before I begin to pray." Clear and distinct came the reply: "We thank you for your thoughtfulness; but he endured many a storm in our service, and we are not afraid of a few minutes' cold at his funeral."

"Surely no funeral is like unto that of a doctor for pathos, and a peculiar sadness fell on that company as his body was carried out, who for nearly half a century had been their help in sickness, and had beaten back death time after time from their door."

Well did he deserve the tribute that was paid him when one of them said: "We have

*Read before the First District meeting of the Woman's Auxiliary, Savannah, Ga., July 29, 1931.
 †Chairman of the Committee on Organization.

buried the remains of one that has served this Glen with a devotion that has known no reserve, and a kindness that never failed for more than forty years. He will never be forgotten while one of us lives, and I pray that all doctors everywhere may share his spirit." The cross above his grave bore the inscription: "Greater love hath no man than this, that a man lay down his life for his friends."

I ask you, my friends, are these men of medicine worthy of our help, our co-operation? Or had I better ask are we, their wives, worthy to be their assistants? The ground on which we stand is holy ground.

Perhaps some of you, who are not members of the Auxiliary, feel that ever since that auspicious occasion when you heard the minister say: "I pronounce you man and wife," that you have been a constant assistant to your man of medicine and that you are only interested in being of help to your individual doctor and not the doctors collectively.

I couldn't if I would, and I wouldn't if I could try to persuade you that your own particular doctor should not be the chiefest among them all to you, for I believe that is a principle on which true civilization rests, but it would seem that it is only a logical conclusion that anything that you could do towards the advancement of the profession, which is such an important part of his life, would naturally be of real assistance to him and could only strengthen the tie that binds you.

Regardless of how much we might so desire, there is little that we can do individually to further this end. "In union there is strength" is true of the wives of physicians as well as of other people.

Osler, in referring to the building of the Panama Canal, says: "There have been a great many brilliant illustrations of the practical application of science in preserving the health of a community and in saving life, but it is safe to say that, considering the circumstances, the history, and the extraordinary difficulties to be overcome, the work accomplished by the Canal Commission is unique," and he adds that "the whole story is expressed in two words, 'effective organization'".

Would that we could become as effective an organization to the Medical Association of Georgia.

Do you recall the motto upon Georgia's first coat-of-arms—*non sibi sed aliis*—"not for self, but for others"? The medical profession of Georgia has recognized this duty and performed this mighty mission.

Lucius Lamar Knight reminds us that: "Georgia, more than any other State, per-

haps, is indebted to her doctors. There were only three men who signed for her the Declaration of Independence, but one of these was a physician—Dr. Lyman Hall of the Parish of St. John; and his name is there forever on the scroll of freedom. Two of the counties of this State were named for medical practitioners—Terrell and Banks. "The morning star of liberty" was Dr. Noble Wimberley Jones. "The Demosthenes of the mountains" was Dr. Homer Virgil Milton Miller. In the nation's Hall of Fame at Washington, each State is permitted to install two statues to bespeak its noblest and best. One of these, which will stand forever in that hall—to quiet all rival claimants to an honor which is justly his—will be a Georgia doctor of the old school, to whom not only Georgia, but the world, is indebted for the discovery of anesthesia—Dr. Crawford W. Long.

Yes, we have a right to be proud of the fact that we have the privilege of being an "Auxiliary" to so noble an organization as the Medical Association of Georgia.

And again I ask, "Why Have an Auxiliary?" To me, at least, it is a consummation devoutly to be wished.

If you, too, feel that these men of medicine are worthy of our assistance, both individually and collectively, I shall be glad to tell you, in detail, as to *how* the Auxiliary is a means to this end.

FIRST DISTRICT MEETING

Medical Auxiliary to Entertain Visitors

The Woman's Auxiliary to the Georgia Medical Society will be hostess to the meeting of the First District Auxiliary which will hold a one-day meeting here Wednesday. The auxiliary meets at the same time that the District Medical Association is in session.

The meeting will be held at the Hotel De Soto at 11 o'clock and the welcome address will be given by Mrs. J. S. Howkins and the response by Mrs. Cleveland Thompson, of Millen. The meeting will be conducted by the District President, Mrs. L. F. Lanier, of Sylva.

Mrs. Ralston Lattimore, the State President, will give an address and Mrs. William Shearouse, the State Chairman of Students' Educational Loan Fund, will also give a talk.

Another interesting address will be that of Mrs. S. T. R. Revell, of Louisville, the State President-Elect, who is also the State Chairman of Organization. Her subject will be "Organization", and she will give some interesting information along that line.

The program will also include a talk by Mrs. R. L. Kennedy, of Metter, on "The Common Defects in Children", and a reading by Miss Anne Richter.

After the business session, the Savannah members will entertain with a luncheon at the Hotel De Soto and later the visitors will be taken to Tybee.

In addition to the out-of-town guests here for the meeting, the local Auxiliary has also invited the wives of the medical staff at the Marine Hospital to attend the luncheon.

The district officers of the Auxiliary are:

President—Mrs. L. F. Lanier, Sylvania.

Vice-President—Mrs. R. L. Cone, Statesboro.

Secretary-Treasurer—Mrs. J. L. Nevil, Metter.

Parliamentarian—Mrs. J. S. Howkins, Sr., Savannah.

—Savannah Morning News, Savannah,

July 26, 1931.

OBITUARY

Dr. A. M. Speer, Macon; University of Georgia Medical Department, Augusta, Georgia, 1884; aged 69; died at his home on June 24, 1931. He was born and reared in Griffin. After graduating in medicine, he began practice at Milner, later moved to Macon, where he practiced for more than twenty years. Surviving him is one son, Alex Speer, Madison. Funeral services were conducted from the Griffin Methodist church by Rev. B. N. McHan and interment in the city cemetery of Griffin.

Dr. George Montgomery McMillan, Cordele; aged 76; died at his home on July 14, 1931. He was the first mayor of Cordele. For many years he was a practicing physician and druggist. Doctor McMillan was a member of the Masonic lodge and a charter member of the Cordele Methodist church. Surviving him are his widow and one son, Virgil McMillan, Tifton. Funeral services were conducted from the home by Rev. Marvin Heflin and interment in the Ochlocknee cemetery.

Dr. James Henry Sessions, Homerville; member; University of Georgia Medical Department, Augusta, 1897; aged 61; died at the home of his brother, Dr. W. W. Sessions, Sumner. He was born and reared at Cuthbert. Doctor Sessions practiced medicine in Macon until five years ago when he removed to Homerville. He served as Health Commissioner of Clinch county for several years. Doctor Sessions was a prominent physician. Surviving him are his widow, one son, M. W. Sessions, Homerville; one daughter, Miss Cynthia Sessions, Homerville; three brothers, Howard Sessions, Macon; Dr. W. W. Sessions, Sumner; and William Sessions, McRae. Funeral services were conducted in Sumner and interment in Riverside cemetery, Macon.

BOOKS RECEIVED

Fractures of the Jaw. By Robert H. Ivy, M.D., D. D. S., F. A. C. S., Professor of Maxillo-Facial Surgery, Graduate School of Medicine and of Clinical Maxillo-Facial Surgery, Graduate Hospital; Consultant in Plastic Surgery, Children's Hospital, Philadelphia; Colonel Officers Reserve Corps, U. S. Army;

and Lawrence Curtis, A.B., M.D., D.D.S., Assistant Professor of Maxillo-Facial Surgery, Graduate School of Medicine, and School of Dentistry, University of Pennsylvania. Contains 180 pages, illustrated with 177 engravings. Price \$4.50. Publishers: Lee and Febiger, Washington Square, Philadelphia, Pennsylvania.

CONGENITAL PYLORIC OBSTRUCTION

Orville Barbour, Peoria, Ill. (*Journal A. M. A.*, Aug. 15, 1931), states that, according to present-day knowledge, the symptoms of congenital pyloric obstruction are dependent on the degree of spasm and the amount of obstruction caused by the tumor. That the pylorospasm is a manifestation of vegetative imbalance is thought by many authorities. There is some evidence that this imbalance is the result of a postnatal involution of the suprarenal glands. Opinions as to the indications for surgical intervention vary a great deal. A therapeutic roentgen test is more reliable than any other procedure. In the medical treatment of these cases, thick feedings, atropine, papaverine, phenobarbital, lavage and gavage are used more or less by various clinicians. Surgically, the Rammstedt operation is the method of choice. Roentgen therapy has been found effective by the author and others in certain cases.

NEWS ITEMS

The Tenth District Medical Society met at Sandersville on August 27th as the guest of the Washington County Medical Society.

Dr. J. D. Martin, Jr., Atlanta, read a paper before the Fulton County Medical Society on August 20th, entitled "Abnormality of Blood Supply to Liver and Gallbladder"; Dr. O. O. Fanning, Atlanta, read a paper on "Influenza and Its Many Complications—Treatment"; Dr. Marion C. Pruitt, Atlanta, "Anesthesia in Ano-Rectal Diseases, with Special Reference to Nupercaine". The papers were discussed by Dr. T. J. Collier, Dr. Allen H. Bunce, and Dr. W. E. Person, all of Atlanta.

The Randolph County Medical Society was entertained at a fish fry at Cordry's Mill near Shellman on September 3rd.

Emory University School of Medicine and the Trustees of Grady Hospital, Atlanta, have reached an agreement whereby medical students of the University may receive instructions in the white unit at Grady Hospital. Physicians on the staff of Grady Hospital who have been appointed Associate Professors of Emory University School of Medicine, are as follows: *Surgery*, Dr. LeRoy Childs, Dr. Ben H. Clifton, Dr. T. C. Davison, and Dr. George Fuller. Teaching Assistants are: Dr. J. G. Riley, Dr. W. S. Dorrough, Dr. Edgar Boling, and Dr. Henry Poer. *Medicine*, Dr. E. S. Byrd, Dr. A. M. Dimmock, Dr. J. H. Hines, and Dr. C. W. Strickler; Assistant Instructors, Dr. J. L. Richardson, Dr. Philip Stewart, Dr. E. B. Wood, and Dr. J. C. Massee. *Obstetrics*, Dr. Frank Eskridge and

Dr. Conway Hunter. *Dermatology*, Dr. Howard Hailley and Dr. H. S. Alden.

The Twelfth District Medical Society met at McRae on August 20th. The following titles of papers were on the scientific program: "Diabetes," Dr. T. E. Rogers, Macon; discussion opened by Dr. H. B. Bray, Wrightsville; "Pregnancy, Following Radium-Caesarian Section with Case Report," Dr. J. Cox Wall, Eastman; "Trachoma," Dr. B. H. Minchew, Waycross; "Office Treatment of Gonorrhea," Dr. Ernest Corn, Macon; "Hypertension," Dr. Stewart R. Roberts, Atlanta; "Spinal Anesthesia," Dr. J. W. Emondson, Dublin; address on Legislation, Insurance, and History by Dr. Arthur G. Fort, Atlanta, President of the Association.

Dr. and Mrs. O. N. Harden, Cornelia, entertained the members of the Habersham County Medical Society on August 7th.

Bust of Dr. E. C. Thrash, deceased, was unveiled in the library of the Academy of Medicine, Atlanta, on September third at a regular meeting of the Fulton County Medical Society.

The Fulton County Medical Society held its semi-monthly meeting at the Academy of Medicine, Atlanta, on August 6th. Dr. W. L. Funkhouser, Atlanta, gave a clinical talk on "Parenteral Infection in Infantile Diarrhea"; the staff of the Albert Steiner Cancer Ward of Grady Hospital gave a clinic.

The Randolph County Medical Society met at the Woman's Clubroom, Cuthbert, on August 6th. Dr. W. G. Elliott, Cuthbert, read a paper entitled "The Prognosis and Treatment of Hypertension"; Dr. F. M. Martin, Shellman, gave case reports.

Dr. Wilborn A. Upchurch and Dr. Wilborn E. Upchurch announce their association in the practice of urology. Suite 911 Doctors Building, Atlanta.

Dr. Sam A. Anderson, after taking a post-graduate course at the University of Pennsylvania School of Medicine and later engaged in practice at Dubach, La., has returned to Milledgeville and opened an office for private practice of medicine.

The American Medical Association has begun a study of all phases of general medical economics, which will be directed by Dr. R. G. Leland, Director of the Bureau of Medical Economics. He will send questionnaires to the officers of all county societies. A prompt response from each society will aid and facilitate the work.

The Glynn County Medical Society held its monthly meeting in the office of the County Commissioner of Health at Brunswick on August 4th.

The Eighth District Medical Society held its summer meeting at Royston on August 12th. The following titles for scientific papers were on the program: "Dermatitis Exfoliative Neonatorum," Dr. B. C. Teasley, Hartwell; "Food Poisoning," Dr. C. H. Bryant,

Comer; "Amebic Dysentery," Dr. G. O. Whelchel, Athens; "The Causes and Treatment of Leucorrhea," Dr. Walter R. Holmes, Atlanta; "Presidential Address," Dr. L. R. Casteel, Metasville; "Legislation in Medicine," Dr. Arthur G. Fort, Atlanta, President of the Association; "Surgery in Diabetes," Dr. Fletcher A. Smith, Elberton; "Cesarean Section," Dr. C. E. Wills, Washington; "Treatment of Sinusitis," Dr. John C. McKinney, Athens. Dr. Stewart D. Brown, Royston, was elected President; Dr. W. D. Gholston, Danielsville, Vice-President; Dr. Linton Gerdine, Athens, re-elected Secretary-Treasurer. The next meeting will be held at Athens in February.

Dr. and Mrs. W. C. Hafford, Waycross, entertained the members of the Ware County Medical Society in their home on August 5th. After dinner was served, Dr. R. L. Johnson, Waycross, read a paper entitled "Malignant Conditions of the Lower Intestinal Tract".

Dr. Chas. W. Crane, Augusta, continues his association on the staff of The Savannah Valley Clinic, Augusta. The statement which appeared in the news columns of the May issue of the Journal that he had been elected Professor of Hospital Administration of the University Hospital, Augusta, was an error picked up from newspapers.

Dr. Thos. R. Ponton has been elected superintendent and Professor of Hospital Administration of the University Hospital, Augusta.

A bill to create ten Congressional Districts in the State has been passed by the General Assembly of Georgia and signed by the Governor. The counties comprising each district follow: *First District*—Bryan, Bulloch, Burke, Candler, Chatham, Effingham, Emanuel, Evans, Jenkins, Liberty, Long, McIntosh, Montgomery, Screven, Tattnall, Toombs, Treutlen, Wheeler. *Second District*—Baker, Brooks, Calhoun, Colquit, Decatur, Dougherty, Early, Grady, Miller, Mitchell, Seminole, Thomas, Tift, Worth. *Third District*—Ben Hill, Chattahoochee, Clay, Crisp, Dodge, Dooley, Harris, Houston, Lee, Muscogee, Marion, Peach, Pulaski, Quitman, Randolph, Schley, Stewart, Sumter, Taylor, Terrell, Turner, Webster, Wilcox. *Fourth District*—Butts, Carroll, Clayton, Coweta, Fayette, Heard, Henry, Lamar, Meriwether, Newton, Pike, Spalding, Talbot, Troup, Upson. *Fifth District*—Campbell, DeKalb, Fulton, Rockdale. *Sixth District*—Baldwin, Bibb, Bleckley, Crawford, Glascock, Hancock, Jasper, Jefferson, Johnson, Jones, Laurens, Monroe, Putnam, Twiggs, Washington, Wilkinson. *Seventh District*—Bartow, Catoosa, Chattooga, Cobb, Dade, Douglas, Floyd, Gordon, Haralson, Murray, Paulding, Polk, Walker, Whitfield. *Eighth District*—Appling, Atkinson, Bacon, Berrien, Brantley, Camden, Charlton, Clinch, Coffee, Cook, Echols, Glynn, Irwin, Jeff Davis, Lanier, Lowndes, Pierce, Telfair, Ware, Wayne. *Ninth District*—Banks, Barrow, Cherokee, Dawson, Forsyth, Fannin, Gilmer, Gwinnett, Habersham, Hall, Jackson, Lumpkin, Milton, Pickens, Rabun, Stephens, Towns, Union, White. *Tenth District*—Clarke, Columbia,

Elbert, Franklin, Greene, Hart, Lincoln, Madison, McDuffie, Morgan, Oconee, Oglethorpe, Richmond, Taliaferro, Walton, Warren, Wilkes.

A History of Medicine in Georgia has been compiled under the direction and supervision of the Committee on History. The members of the committee have worked faithfully without compensation for a number of years to complete the work which will be ready for the printers at an early date. All who wish to subscribe as Patrons and pay \$10.00 now or later for a copy of the De Luxe Edition, should send in their names to the Secretary-Treasurer of the Association at once. The history will carry the names of all Patrons.

The members of the Carroll County Medical Society were entertained at a banquet given at the Hotel Crepe Myrtle, Carrollton, on August 17th.

The Jefferson County Medical Society met at the Jefferson Hotel, Louisville, on August 7th. Dinner was served to the members of the society and Woman's Auxiliary.

PATHOLOGIST WITH EXPERIENCE—Young man, Laboratory and X-Ray Technician, with ten years' experience, wishes to make a permanent location with group of doctors or in hospital; was assistant instructor in Clinical Pathology at Emory University for two years, and taught Bacteriology to student nurses for two years; well trained in all Laboratory and X-Ray procedures. Can furnish reference both as to professional ability and character.—Address E, care of The Journal.

YOUNG PHYSICIAN WANTED

Not over thirty years of age. Graduate from Class A school, with at least one year hospital training. Excellent association and location. M., care The Journal.

YOUNG PHYSICIAN WANTED

Graduate of approved medical school, with ability to work as an associate of doctor with established practice. Good opportunity. R., care The Journal.

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DERMATITIS MEDICAMENTOSA DUE TO EPHEDRINE

Samuel Ayres, Jr., and Nelson Paul Anderson, Los Angeles (*Journal A. M. A.*, Aug. 15, 1931), call attention to some of the cutaneous reactions produced by ephedrine and present some experiments dealing with attempted passive transfer of sensitivity of this drug. They present two cases of dermatitis medicamentosa due to ephedrine, in which there were both a local dermatitis at the point of application and a more or less generalized eruption, erythematous and purpuric in case 1, and erythematous and edematous in case 2. Emphasis is laid on the fact that knowledge that ephedrine can produce such cutaneous manifestations may be of value in determining the cause of obscure eruptions about the nose, face and elsewhere.

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PRESENTATION OF A LOVING CUP TO THE MEDICAL ASSOCIATION OF GEORGIA BY ITS DONOR*

L. G. HARDMAN,† M.D.
Atlanta

Mr. Toastmaster, Members of the Medical Association of Georgia, Ladies and Gentlemen:

Of all the learned professions, the practice of medicine is the most ancient, and the most universally respected. Mankind has always been subject to disease and injuries, and from the earliest times the care and treatment of such affections have been relegated to certain classes of society supposed to be especially skilled in such matters. The code of Hammurabi, King of Babylon, 2200 B. C., consists of 282 laws, nine of which refer to the practice of medicine and surgery. So we see from these laws that the physician and surgeon occupied a distinct social position even in the ancient Assyrian society. The temples erected in honor of Aesculapius were always located in airy, sheltered, healthful places, and might be considered as prototypes of the modern sanatorium. Hippocrates, who laid the foundation of scientific medicine, as we all know, was a priest of Aesculapius about 400 B. C.

But let us pass on to our own generation!

Among the noteworthy medical discoveries of the nineteenth century none is more important than that of Crawford W. Long, who made the discovery of the anaesthetic value of sulphuric ether on March 30, 1842, at Jefferson, Jackson County, Georgia. Doctor Long was a charter member of the Medical Association of Georgia, which was organized in 1849. It might be said with some degree of pride that Louis D. Ford, of Augusta, the founder of this Association, was the discoverer of quinine for malaria. It can also be said that L. A. Dugas, of Augusta, suggested first, and put into operation, in 1856, the cure of tuberculosis. It was the same man who preceded Sir Joseph Lister by four years in the discovery of the antiseptic virtue in tar water in the treatment of

gangrene. He also suggested first the laparotomy for gunshot wounds of the abdomen—at the British-American Medical Association in Philadelphia, in 1876; and was the first to close a wound of the small intestines with catgut.

Your humble servant, the present Governor of Georgia, is the third doctor in the history of the State to occupy the gubernatorial chair. Nathan Brownson, who was not only a skilled physician—demonstrated by his successful service as a surgeon in the War of Revolution, and later because of his ability appointed deputy-purveyor for the Southern hospitals—but also a prominent figure in connection with the establishment of our historic State University, was the first, being elected in 1781. Governor Brownson was a member of the Continental Congress of 1776, of the State Convention which ratified the Constitution of the United States in 1778, and of the convention which amended Georgia's Constitution in 1789.

The next doctor-governor was Lyman Hall, who also was a delegate to the second Continental Congress, and one of the signers from the colony of Georgia of the Declaration of Independence. He was called to the Governor's chair in January, 1783.

So we see that the physician and surgeon is sometimes called upon to fill other chairs than those of medicine and surgery!

During the centuries of development through which this world has passed, our ideals of greatness have changed.

In ancient history, the man or woman who was considered great was the one who was in position of power, surrounded by material pomp and splendor. In those days, had an honor roll been made up of the great ones of the earth, it would have consisted principally of military leaders and kings.

Today, if we should make up an honor roll, it would consist of the men and women who have served humanity, those who have forgotten self and all selfish interests, and have devoted time and talent and energy to the cause of alleviating human suffering, and improving the conditions under which humanity must live. But few, if any, scientific bodies mean so much to humanity, to the happiness and prosperity of our entire State

*Presentation address before the annual banquet of the Medical Association of Georgia, Atlanta, Ga., May 14, 1931.
†Governor of Georgia, 1927-1931.

and Nation as our doctors and our Health Departments. The high type and character of you men who are devoting your lives to the prevention and relief of human pain and suffering suggests the nature of the Divine Healer; and the basis of the thought inspiring the presentation of this cup to the Medical Association of Georgia is to stir in our souls additional activity for the extension of our science in solving the unsolved problems of public health—to add also to the many contributions made in the prevention of disease and the safety in major operations on the human body.

I doubt if any of the advancements in the sciences—whether in aviation, transportation, or electrical discoveries—telephone, radio, etc., have outstretched the progress made in medicine for the prevention and relief of human suffering during the past twenty-five years; and I wish to congratulate you, the guardians of the health of the people of Georgia, and those who have gone before, for the many contributions this State has made—not only to Georgia, but to the world.

In the presentation of this cup I wish to express my intense and highest appreciation of the great and noble spirits which live in the bodies of the men of the Medical Association of Georgia and the Health Department of this State—you who bless and bring sunshine. I trust many more contributions will be made for the relief of human suffering—that many names and discoveries shall be placed on this cup, to be handed down to future members of this Association.

On the cup is the following engraving:

Presented to the Medical Association
of Georgia
by

Governor Lamartine Griffin Hardman,
M.D., B.S., D.A., LL.D.

First physician to be Governor of Georgia
in over a century.

Given

In token of his esteem for the
medical profession

And the Department of Health of this State.

To be

Placed in the State Treasury for safe-
keeping and removed

From time to time by the President
of the Association

For the purpose

Of placing on it the name, date and
achievement of anyone

Who has, in the judgment of the
Association, attained any

Outstanding problem of public health,
or made any discovery

In medicine or surgery.

Love to the Loving Cup

As we lay you away in the vault of the Capitol "our only friend is memory". These friends of memory pass through the walls as an x-ray, giving to the world joy and happiness over the achievements that memory holds so dear.

It was 4200 years ago when the King of Babylon, Hammurabi, expressed in his code the memories of the healing art of medicine and surgery.

Twenty-four hundred years ago it was Aesculapius, Hippocrates, and Galen who gave to us the true idea of sanatorium location.

It was 2000 years ago that the Master came forth from Joseph's tomb and restored the sight of the blind, healed the paralytic, and cured the incurable. It is these memories which linger in your body, whose shining crystals span the world in consolation and joy.

Your body sleeps in this vault, but your memories give sunshine and gladness to all past eternity.

The memories of those who founded this organization and contributed to mankind untold relief of human pain—as Louis D. Ford, Dr. L. A. Dugas, Crawford W. Long, and Robert Battey—are stored away immortal, as they are in the walls of your body.

When winter is passed and the sun-rays bring forth the buds of the spring to gladden the birds and mankind, you shall come forth again to be presented to this body of medical men—to lay your body down to have marked and carved upon it the advancements and achievements made, and to have the name carved thereon.

There is engraved on your bosom the seal of this great commonwealth, in which are the words: Wisdom, Justice, Moderation. The Master declares that wisdom is more precious than rubies, and gives to us longevity, wealth and honor; and that justice is the essence of God manifested in righteousness. At the base of the engraving is the caduceus, representing the ancient idea of the power of the serpent. Thus in your body is represented the highest ideal of life.

When the malignant cancer, the dread of human life, is cured; when malaria shall be banished and have no domain in the region of the human body; when these engravings have been placed on your body you shall again be returned to the vault of the State to sleep another winter, and new memories, our only friends, are hurled through the entire universe that cancer and malaria are no longer the dread of mankind.

After you have spent the autumn and another winter in the vault, again in the spring you come forth and present your body to the

Medical Association of Georgia, to have engraved thereon the discovery of the principles of sanitation and public health, and to give to the world a new memory of the longevity and safety of life—and to again hurl to the universe that man shall live without disease, and his body shall be that of a Sampson, and his years shall be those of a Methuselah.

Memories, sweet memories, how dear are they to our lives, our only friends!

X-RADIATION AS AN AID IN THE TREATMENT OF MENOPAUSAL DISTURBANCES*

Clinic

JAMES J. CLARK,† M.D.
Atlanta

The menopause is described as that period in a woman's life when menstruation ceases. Accepting this definition as a fact, the question arises: At what age does a woman enter her menopause? All physicians are accustomed to treat patients who undoubtedly have been or are in the menopausal stage for several years.

We commonly expect a woman to cease menstruating somewhere between 45 and 50 years of age; however, there are exceptions to this rule in that occasionally a woman will have her menopause in her thirties, and others will not enter the menopause until after 50 years of age.

The two important periods in the life of a female are when her menstrual periods begin at puberty and when the periods cease at the menopause. Many girls show unusual and rather paradoxical symptoms at puberty, which, when the menstruation is established gradually disappear to a more or less degree. In the same manner many females, during their early or late thirties, apparently enter a physical state which indicates an approaching menopause.

During this period, many diverse symptoms are manifested. There may be disturbances of practically any part of the body:

Mental, neurological, respiratory, cardiac, genito-urinary and others. Frequently, these symptoms will simulate definite diseases, but, when treated, fail to respond as we usually expect them to do. These patients complain of insomnia, nervousness, excessive irritability, which is especially manifested just before the onset of the menstrual function. Many women will admit that they realize they are unreasonably irritable, but cannot help themselves; often their husbands will confirm this. Then we have a large class of women who must work, and they have difficulty in holding their positions due to their irritable temperament and the loss of time incident to disturbed menstrual functions. It is very important to this type of patient that their health be maintained so that their efficiency will not be lowered, as their livelihood depends entirely upon their efficiency.

During the past fifteen years, I have established the menopause in many patients with uniformly very satisfactory results. Two cases which I wish to report as illustrating the unusual symptoms presented are as follows:

Mrs. A.—Referred by Dr. H. M. Davison, in July, 1929.

Mrs. A.—Came under observation in January, 1928, complaining of precordial distress and a feeling of suffocation. These attacks had manifested themselves at frequent intervals during the past year, but had increased in frequency during the last three or four months. The history shows that the patient has usually been comfortable during the day and was able to perform minor routine household duties up to within about six months ago. From that period until the present time, the attacks have increased in frequency and during certain periods she suffered four or five attacks during the day, and at certain times appears to be never free from some precordial distress. This precordial distress and feeling of suffocation is more often manifested at night.

Physical examination on the day of observation, January 24, 1928, shows an individual 47 years of age, married for twenty-two years, two children, no miscarriages, pelvic operation 1908—(Appendectomy and uterine suspension)—weight 138½ pounds, height 67 inches, temperature 98, pulse 80, skin and mucuous membranes clear, color fair with a flushed appearance at times. Eye—pupils react to light and accommodation, equal, no nystagmus, no exophthalmos, thyroid gland not palpable; neck—scar extending along the entire sterno clidomastoid, right, result of operation in childhood for cervical adenitis. No cervical glands palpable at this time. Lungs clear. Heart

*Informal clinic before the Medical Section of the Medical Association of Georgia, Atlanta, Ga., May 13, 1931.

†Roentgenologist, Wesley Memorial Hospital, Grady Hospital, Eggleston Hospital, and Good Samaritan Clinic; Associate Professor of Roentgenology of Emory University School of Medicine.

normal in size, regular in action, rate 88 per minute B. P. 150/80. A soft systolic murmur is heard over the second interspace. The murmur is not transmitted and is not heard when the patient is sitting or standing. Radiographic report shows the heart and lungs apparently normal. Abdomen is flaccid; no masses or tenderness felt. Extremities normal, except for hallux valgus. Patella reflexes equal and normal. Blood count normal. Urine negative. Basal metabolic rate minus 7%. The patient was sent to the hospital February 15, 1928, and the report of the electrocardiogram shows rate 70, rhythm regular. P waves upright in lead I and II, inverted in lead III. T waves deeply inverted. Lead I, diphasic and low voltage. Lead II upright; Lead III. P-R. S. 20 seconds.

The examination of the heart showed nothing remarkable. Chief complaint is precordial pain, which is stated to occur in excruciating paroxysms, but differs from the usual type, as this patient states that her attacks are most severe in the early morning and while in bed. On pinching the skin of both breasts there is a complaint of numbness rather than paresthesia or hyperesthesia on the left. The prognosis given was bad. No special cardiac treatment indicated. Irritation of ovaries is suggested.

The patient returned, after a period of three weeks in the hospital, and the records show, under date of March 15th, 1928, that the patient is not having as many flushes, but still has much precordial distress and from one to four anginal attacks daily. These attacks, however, are reported to be short and less severe than previously and are relieved by nitroglycerine tablets. Examination of the heart at this time shows no hypertrophy, is regular in action, rate 80, with a blowing systolic murmur in the second interspace to the left, not transmitted. B. P. 130/76. The patient was referred for x-ray treatment anteriorly and posteriorly over the cardiac base. Patient returned in two weeks and records of March 22nd show: Weight 142½ pounds, cardiac rate regular, B. P. 148/90. Treatment: Luminal grains 1, t.i.d. Nitroglycerine as needed. Referred to x-ray for further treatment. April 12, 1928, weight 142 pounds. No change in heart. The attacks seem much less in frequency and patient has had but two attacks in the past ten days. Menstruated March 29th, 1928. Referred for more x-ray treatment. April 16, 1928, shows patient not so well and reports attacks as being more frequent. Luminal increased to grains 1, four times daily; referred for another x-ray treatment in ten days. May 11, 1928, weight 140 pounds. B. P. 140/80.; no cardiac changes, patient feels much improved. Placed on Ovarian capsules, grains five, twice daily. The patient returned at intervals during the months of May and June for observation, shows considerable improvement in her general physical condition.

Menopause will be produced to see if it will stop angina.

Therapy x-radiation started July 21, 1929, and completed August 8th. During August, period came very scant, and was nearly free from anginal attacks.

August 12th, additional therapy; completed August 15th.

September—Reported no menstrual period, a few hot flashes, no angina; patient looks and feels fine.

Reports during 1930 and early 1931: No evidence of any menstruation during this past year and a half, and complete freedom from anginal attacks. Is up and attending to her social and household duties, with no evidence of any cardiac weakness or pathology.

ROENTGEN RAY THERAPY IN THE TREATMENT OF TETANY

Case No. 2.—Mrs. M, Age 39, white.

Family History: Father living, age 82, in good health, no history of serious injury or illness. For a number of years has had occasional attacks of severe cramps in plantar muscles, usually at night, also spasm of muscles in region of heart, resembling angina.

Mother living, age 69; excellent health since menopause; during middle life suffered attacks attributed to heart.

Brothers, one living, age 47, excellent health up to 1919 when he had a severe attack of polio-myelitis, affecting both legs; has made but slight recovery from subsequent paralysis.

Sisters, one living, has always enjoyed excellent health; two sisters died during infancy.

Previous Illness—At about sixth month of first pregnancy, in April, 1914, began to have occasional attacks of what seemed a disturbance of respiratory action. These attacks occurred at frequent intervals and were marked by difficult breathing, pains in region of heart and spasm of muscles in arms and legs. At this time she was under the observation of the leading obstetrician of El Paso, Texas, and her symptoms were not considered alarming. She was delivered at full term July, 1914; labor was difficult and accompanied by unusually difficult respiratory action. Child was normal and there were no injuries to the mother, except a small perineal tear, which was repaired at once. Infant was nursed for several months, but in December, 1914, patient accompanied her husband, an army officer, to Panama, and it was necessary to place the child on artificial feeding because of mother's failing health. Soon after arriving in the tropics, it was deemed advisable for her to be placed in bed because of diminishing strength and frequent attacks of general muscular cramps. She remained in bed for over a month, was treated symptomatically, and received special diet and massage. She had no fever at any time, no digestive trouble, blood was negative for malaria, and no symptoms of endocrine disturbance could be elicited.

A diagnosis of tetany was made and she was given large doses of calcium lactate by mouth. There was slight improvement in her condition by late summer, and in October, 1915, she returned to the United States. She was given a careful examination by an eminent gynecologist at Omaha, Neb., who found no physical basis for her symptoms and stated that she was "a race horse type trying to do a dray horse

work". She remained in Nebraska until March, 1916, when she returned to Panama, living there until September, 1917. During this period she was free from severe attacks of tetany, but had frequent minor symptoms.

She was given a thorough physical examination, functional tests, laboratory examination of urine, blood and feces, gastro-intestinal series, etc. The findings of Doctor Dunn were that she had true tetany, but he was unable to locate the cause and empirically he prescribed massive doses of calcium lactate and a diet rich in calcium.

Her husband returned from France in the summer of 1919, and she was still showing signs of tetany, especially when fatigued mentally or physically.

Although she had no symptoms pointing to endocrine disturbance, it was decided to try various gland extracts by mouth.

At varying intervals, the following were tried: thyroid, parathyroid, pituitary, adrenals and ovarian, but in each case she showed the toxic effect of over-secretion in forty-eight hours.

She became pregnant for the second time in the fall of 1919 and tetany became more severe, reaching the stage of severe cramps of extremities. These attacks were more pronounced every four weeks, corresponding to menstrual periods.

She was confined in July, 1920—labor was difficult and tetany symptoms added to the severity. After five hours of exhausting pains and tetany cramps, it was necessary to give morphine hypodermically, and following the relaxation produced, the child was delivered promptly.

For a number of years, she improved slightly, but was never entirely free from slight symptoms, manifested by a feeling of pressure in the head and occasionally prolonged tightening of certain muscles, particularly those of the neck region.

In 1928, the tetany symptoms became more pronounced, especially during menstruation, which lasted from seven to ten days each period, with very heavy flowing. During each period she had at least one extremely severe attack of tetany, with marked cramping of extremities, and respiratory muscles, so much so that artificial respiration was resorted to, as well as inhalations of amyl nitrate.

After several months, with no improvement, she was given a course of ultra violet ray treatment with deep massage of neck muscles, which were constantly rigid.

The latter condition was somewhat relieved, and the ultra violet seemed to have considerable tonic effect, but the profuse, prolonged menstruation continued.

In June, 1929, she was examined by a competent gynecologist, who stated he could find no cause for the menstrual disorder other than beginning menopause, which at her age (thirty-eight) was quite unusual. After consultation with the surgical and x-ray services, it was decided in view of her tetany and menorrhagia, to apply x-ray with a view to producing menopause.

She was given a two-third erythema dose in 1929; menstrual periods ceased and tetany symptoms disappeared.

She went through extensive dental treatment in October, having all teeth extracted, and complete dentures fitted, without any indication of tetany. (Patient's teeth had given considerable trouble, being prone to develop cavities in late years, because of the severe tetany attacks brought on by dental work, she was unable to keep her teeth repaired, and extraction was advised).

For a period of one year she was free from tetany, gained in weight and strength and felt better than she had at any time during the past fifteen years.

About August 1, 1930, she began noticing a tightening of neck muscles and a feeling of fullness in the head. After a few days of prodromal symptoms, a severe menstrual flow began, and she had a moderately severe attack of tetany.

Her condition relapsed to much the same as that of a year ago, before the x-ray therapy, but there was no recurrence of the menstrual period at the end of four weeks, though she did notice a feeling of fullness in her breasts and pains in region of ovaries.

As the next menstrual period approached, her tetany warnings became more pronounced and with arrival of her period, she had a severe attack, followed by several more in the next two weeks.

It was decided to repeat the x-ray treatment and give a full sterilization dose.

Last period September 25th, 1930.

On October 1, 1930, x-ray treatment was started to bring on artificial menopause. She was having daily attacks of tetany, which could be relieved only by amyl nitrate.

We decided to go ahead slowly, endeavoring to so treat her that we would not have any nausea or other unpleasant reactions.

On October 13th, the first series was completed. At this time she still complained of pressure on head and neck, with a tight collar-like band around the neck.

On November 3rd, she reported at the office; has had no evidence of a period and has been completely free from tetany. In order to be sure the periods had been stopped, a second series of x-radiation was started and completed November 10th.

Monthly reports since November show a complete absence of attacks of tetany, also no evidence of menstruation. She has had a few hot flashes, but this does not bother her and her general health has greatly improved. Gained nearly ten pounds in weight and feeling fine. Attending parties and entertaining.

Method of Procedure and Technique

There are three methods which may be followed in order to produce a menopause, namely: Surgery, radiation with radium or radiation with x-ray. In the type of case which I have been discussing, surgery is certainly contra-indicated, inasmuch as these patients are ambulatory and can be satisfacto-

rily treated at the office. The use of radium requires, in many patients, an anaesthetic, dilatation of the cervix, insertion of the radium for twelve to twenty-four hours, with the attendant hospital expense and other discomforts.

As we well know, the ovaries are extremely sensitive to radiation. The patients are given x-ray therapy averaging thirty minutes at each treatment until a sterilization dose has been reached. These patients, if they are business women, receive their treatments during their lunch hour, with no loss of time from their positions; or, if they are housewives, they are treated at hours convenient to them. The dosage is maintained at a level which will not produce nausea or any other discomfort. A week or ten days is generally required to institute a full series of x-radiation. Probably the total time on the x-ray table will average about three hours.

There is no way of deciding in advance as to whether one or two series of treatments will be required, as there appear to be many factors which control the effect of the dose. They are: First, the younger the woman is, generally the more radiation she will require for the production of menopause. Obese patients with thick abdominal walls usually require more treatment than thin patients, as naturally the amount of tissue between the ovaries and the surface of the body will act as a filter and prevent the full effect of the x-ray dose from reaching the ovary. I also believe that the location of the ovaries has some bearing upon its response to radiation.

After a first series is completed, the patient is directed to report as to the appearance, duration and amount of the next menstrual cycle. Many women will never menstruate after this first series of treatments. Others will menstruate normally or show some disturbed function. If the period returns, a second series is given six weeks later, and this usually results in a complete menopause.

The benefits derived from this graduation of dosage are pronounced: First, there is no radiation sickness. The patient is up and attending to her affairs during the entire course. Second, establishing this menopause over a period of one or two months permits the

woman to become accustomed to gradual loss of ovarian function, so that there is very little trouble with nervousness, hot flashes, etc. It really seems to produce a menopause of a type that we would classify as normal.

In conclusion I would suggest that more attention be paid to women who are approaching the menopause, and who are invalidated for many years due to some indefinite complaint. In the two cases reported today, both gave us a clue to the probable source of their trouble, in that their symptoms were always aggravated just before and during their menses. Production of the menopause returned them to normal health.

DISEASES OF THE CHEST*

Clinic

CARL C. AVEN, M. D.

Atlanta

This clinic will be devoted to a discussion of three diseases of the chest that produce the greatest economic loss due to their chronicity, namely:

1. Pulmonary tuberculosis.
2. Lung abscess.
3. Bronchiectasis.

All acute diseases of the lungs will be barred from discussion. Typical, well-defined cases of these three should not present any difficulties in differential diagnosis, but frequently non-tuberculous abscesses may be diagnosed as tuberculosis or bronchiectasis as tuberculosis. All sanatoria for the treatment of pulmonary tuberculosis receive their proportionate share of chronic lung abscess and bronchiectatic cases.

My object in this discussion is to refresh your memory with the more common, yet frequently overlooked symptoms. Familiarity with the patient's life and history often is the cause of mistaken diagnosis. All doctors should remember that tubercle bacilli are no respecters of persons. Procrastination to acquaint the patient with the doctor's suspicions of tuberculosis is so often fatal. Let me

*Informal clinic before the Medical Section of the Medical Association of Georgia, Atlanta, Ga., May 13, 1931.

warn you to be frank, for your first duty is to your patient. Prevention by early recognition and adequate treatment is the means of solving the tuberculosis problem. Let me direct your attention to the early diagnosis of lung abscess; for instance, of spirochetal origin, for many of these will yield to proper treatment, with early and complete recovery.

Bronchiectasis will not become so disabling if it is recognized and treatment instituted before the disease has produced chronic invalidism.

Referring to tuberculosis, I warn you that nothing in medicine is worse done than the early diagnosis of this disease. The classical and obsolete classification of rales is one of the most confused of all diagnostic signs. The terms "crepitant" and "sub-crepitant" are entirely ambiguous.

Stuart Pritchard makes the statement that: "Tuberculosis diagnosed as minimal in the upper part of either lung has cleared after a deflected septum was successfully cared for." Such mistakes are not uncommon. Let me stress the importance of colds, so-called "grips" and other frequent upper respiratory infections, because the laity have recently realized their significance, even more than the medical profession.

The foregoing general remarks are merely to direct your attention to some of these facts.

Diagnosis of Tuberculosis

Dr. Laurason Brown, of Saranac Lake, is responsible for the statement that: "About 40 per cent of tuberculosis begins with the gastro-intestinal onset, and about an equal number begins with the constitutional or systemic onset, accompanied by such symptoms as loss of weight, fatigue, light cough, loss of appetite, etc. About five per cent, or more, begin with hemorrhage." The other types of onset he mentions are fistulas, particularly fistula in the anus, laryngeal, etc.

Observers of today call attention to acute type of onset, which may be termed pneumonic or influenzal. Benjamin Goldberg, of Chicago, has observed this type of onset in children and called it epi-tuberculosis. This is one of the most fatal types of the disease,

but recovery is not uncommon, if recognized early.

The diagnostic criteria, as used in Trudeau's, are as follows:

1. Tubercle bacilli in the sputa.
2. Rales above the third rib, and third vertebral spine.
3. Hemorrhage of one dram or more, unaccounted for.
4. Pleurisy with effusion.
5. Parenchymatous x-ray involvement.

A negative diagnosis should never be made in the presence of one or more of the above mentioned criteria.

Don't forget that a positive diagnosis of tuberculosis can be made in the absence of tubercle bacilli. Treatment should be summarized as follows:

1. Rest—meaning absolute rest in bed as long as the afternoon temperature is 99-plus and pulse 90-plus.
2. Food. This should not be forced to the point of being obnoxious to the patient, but a well-balanced, nutritious and easily digested diet should be used.

By way of parenthesis, let me add that my opinion is that the present knowledge of vitamins has somewhat revolutionized the treatment of tuberculosis and may perhaps be a much larger factor in future treatment.

3. Fresh air is very essential, but should be used guardedly and always with attention to the patient's comfort.
4. Medicine. In the past many remedies have held repute, largely to be discarded as our knowledge of the pathology of this disease increased, but let me particularly call attention to such remedies as cod liver oil, tuberculin, calcium, etc.
5. Surgical treatment, including artificial pneumothorax, phrenicectomy, and extra-pleural thorocoplasty. (The prognosis and details will be discussed with case reports and lantern slides).

Lung Abscess

The diagnosis of acute lung abscess is possibly one of the easiest made, but its relative infrequency is responsible for common errors. I might state that the relative infrequency of

lung abscess, as a complication or sequelae of pneumonia, is not to be overlooked, for it was formerly thought that this was a very common thing. The diagnosis of lung abscess can usually be made by the sudden onset, pleural pain, the septic type of fever, the foul sputum, and often history of previous operations or anaesthesia.

This is not to be confused with tuberculous abscess. Examination of sputum will usually reveal the predominating organisms, which, in a large series of cases have been found to be strepto-cocci, pneumococci, influenza bacilli and staphylococci.

David T. Smith has called attention to a type of abscess of spirochetal origin with fusiform bacilli present. He has demonstrated about six different spirochetes present. This type of abscess is easy to diagnose and most amenable to treatment, yielding in the larger percentage of cases to the use of arsenicals, intravenously, and iodine. X-ray and lipiodol injections are of inestimable value in diagnosis of lung abscess. The details of these procedures will be discussed and lantern slides and cases presented.

Bronchiectasis

The diagnosis of bronchiectasis is much more frequently made than formerly. This may be due to the diligence on the part of the profession and to the use of better diagnostic methods. The symptoms of bronchiectasis are frequently those of pulmonary tuberculosis, and in their order of frequency are: First, cough. Second, fever. Third, emaciation. Fourth, hemorrhage, even with loss of large amounts of blood. Fifth, so-called clubbed fingers. The diagnosis can usually be confirmed by lipiodol injections and x-ray. Treatment will be discussed with presentation of lantern slides and patient.

The Medical Association of Georgia will hold its next annual session at Savannah, May 17, 18, 19, 20, 1932.

The regular scheduled dates for the next annual session of the Medical Association of Georgia have been changed by the Council from May 10-13, 1932 to May 17-20, 1932 to avoid conflicting dates with the American Medical Association.

The Southern Medical Association will hold its next annual session at New Orleans, November 18, 19, 20, 1931.

The American Medical Association will hold its next annual session at New Orleans, May 9, 10, 11, 12, 13, 1932.

THE CLINICAL USE AND VALUE OF THE ELECTROCARDIOGRAPH*

Clinic

H. CLIFF SAULS, M.D.

CARTER SMITH, M.D.

Atlanta

The electrocardiograph is now an integral part in the study of heart disease or suspected heart disease. Information obtained by its use is often invaluable in the management of these patients.

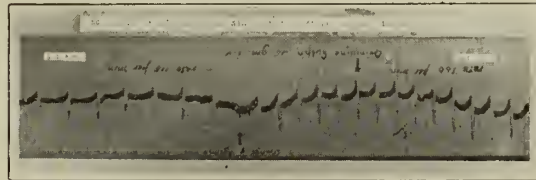
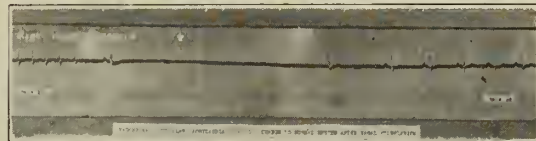
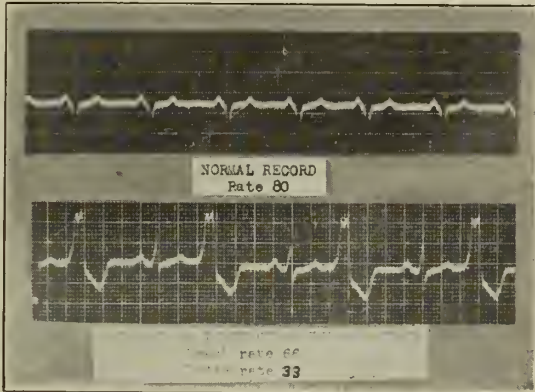
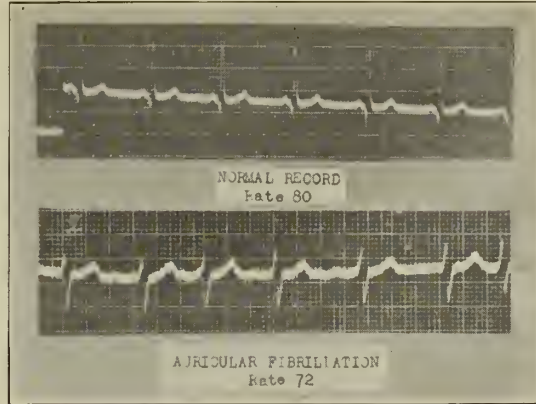
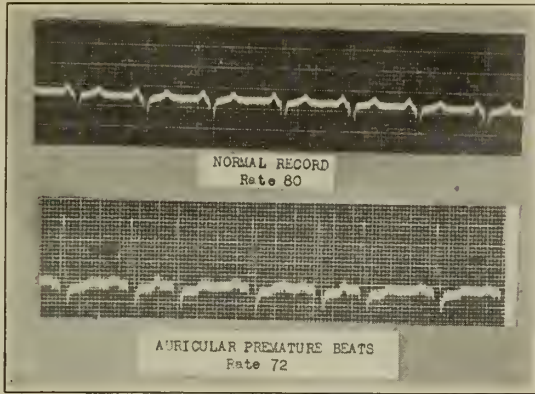
It is the purpose of this paper to illustrate the clinical value of this procedure by reporting cases in which it materially aided in the diagnosis, prognosis, and treatment.

When one understands *the principle of the electrocardiograph* its real clinical value can best be understood. Briefly, it may be defined as a photographic representation of the excitation, contraction, and relaxation of the heart muscle. This recording is obtained by a utilization of the physiologic principle that muscular activity produces an electric current. The current generated by cardiac activity is picked up by the electrocardiograph machine and passed through a magnetic field in which is suspended a fine quartz string. This causes a deflection of the string and its movements are photographed—thus the electrocardiograph.

The excitation, contraction, and relaxation of the heart muscles occur in a very orderly and constant sequence unless altered by disease. The normal electrocardiograph is then a very constant characteristic curve. Any diseased process that disturbs the normal function of the conduction system or musculature of the heart will cause an alteration in this characteristic curve.

A brief review of *the conduction system of the heart* will probably aid in an understanding of the mechanism and clinical value of the electrocardiograph. Originating in the wall of the right auricle at the sino-auricular node the impulse that initiates cardiac contraction then traverses the walls of the auricle, spreading from right to left by means of the interauricular band of Bachman. The excitation process then reaches the atrioventricular

*Informal clinic before the Medical Section of the Medical Association of Georgia, Atlanta, Ga., May 13, 1931.



node at the septal junction of the auricles and ventricles. Here the bundle of His is formed and after traveling down the interventricular septum for a short distance divides into its right and left branches. These two main branches then divide and subdivide into the Purkinje fibres which terminate throughout the myocardium of the ventricles. Thus any disease process which affects the myocardium may also disturb the conduction system and cause the electrocardiogram to be abnormal.

Cases illustrating some of the more definite abnormalities that occur in the electrocardiogram are presented below.

Case 1. A differential diagnostic problem in HEART BLOCK. J. Mc. K., a white male of forty years was first seen by a physician for palpitation of the heart in 1925. At this time the heart was not enlarged and there was no peripheral vascular damage. On auscultation over the apex of the heart the first and second sounds were normal and followed by a third sound. There was then a long diastolic pause and the cardiac cycle began again. The blood pressure was normal. The radial pulse rate was forty per minute. The patient was told that he had complete heart block and advised to limit his physical activity. During the next five years he led the life of a semi-invalid

in spite of the fact that his only complaint was palpitation of the heart. This symptom had greatly increased with the development of a marked cardiac neurosis. One year ago he was seen by another physician who doubted the diagnosis of complete heart block. An electrocardiogram was made and interpretation of this record showed no heart block. There was a ventricular premature beat occurring immediately after every normal beat. This premature beat occurred when the ventricle was only partially filled with blood and its contraction did not expel a sufficient amount of blood to cause a pulsation of the radial vessels. Thus the radial pulse rate of forty per minute and the third heart sound heard when listening over the apex.

It was difficult for this patient to be convinced that he did not have heart block or heart disease. After continued reassurance, however, he found that he could exercise and conduct himself as a normal man without any unpleasant results. This patient could have been spared of the five years of semi-invalidism had a more thorough study of his heart been made. A clinical diagnosis of ventricular premature beats can usually be made without difficulty. They are often interpreted as dropped beats, or partial heart block and I have seen four patients similar to the one reported above in which the diagnosis of complete heart block was made. An electrocardiogram will remove all doubt as to the certainty of the diagnosis and in any case in which dropped beats or complete heart block is suspected a record should be made.

Case 2. Illustrating the occasional difficulties en-

countered in the differential diagnosis of IRREGULAR HEARTS. G. M. W., a colored male hospital orderly of fifty years was first seen for palpitation of the heart in 1925. At that time his heart rhythm was grossly irregular and there was a pulse deficit of fifteen per minute. The rate at the apex was 100 per minute. There was no cardiac enlargement, the blood pressure was normal and there was only a moderate degree of generalized arteriosclerosis. He was seen by several physicians and the arrhythmia diagnosed auricular fibrillation. Five years later the arrhythmia was unchanged but there was still very little evidence of vascular disease and the circulation was perfectly competent. An electrocardiogram was made at this time and instead of auricular fibrillation the arrhythmia was found to be auricular premature beats. The arrhythmia was clinically almost identical with auricular fibrillation but the patient did not have the underlying pathological changes that usually accompany auricular fibrillation.

A correct diagnosis is of great importance in cases of this sort, as the management and prognosis is quite different. An irregular heart, due to auricular fibrillation is a diseased heart, while an irregularity arising from premature beats may occur in an otherwise normal heart. An electrocardiogram should always be made to determine the type of irregularity present.

A differential diagnosis of rapid heart action is often very difficult without the electrocardiogram and, as with irregular hearts, we have both benign and malignant types of tachycardia.

Case 3. Illustrating a MALIGNANT TYPE OF RAPID HEART ACTION. L. M., a colored female of 38 years of age, was admitted to the hospital with congestive heart failure and hypertension. At the time of admission the heart rate was regular at a rate of 120 per minute. The patient was given 1.5 grams (22.5 grains) of powdered digitalis during the first twenty-four hours in the hospital. She was then given .6 grams (9 grains) daily. After six days of this massive dosage she suddenly became much worse. Circulatory collapse was marked and the heart rate was 90 per minute and practically regular. Ventricular tachycardia was suspected and confirmed by electrocardiogram. The patient was then given .15 grams quinidin sulphate intravenously. There was an immediate cessation of the ventricular tachycardia and a nodal rhythm at a rate of 115 per minute was established. The patient was greatly improved and the circulatory collapse was much less. There was a recurrence of the ventricular tachycardia on two occasions during the next seventy-two hours and a slow nodal rhythm was promptly restored with quinidin sulphate. The patient later died of a gastric hemorrhage.

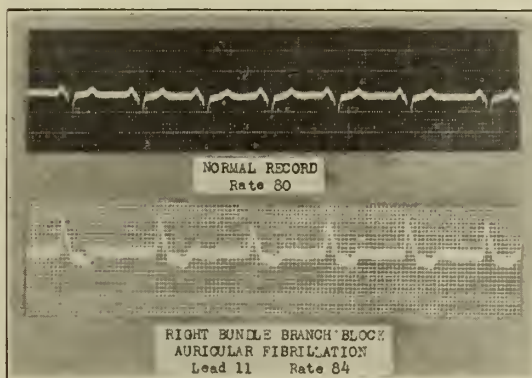
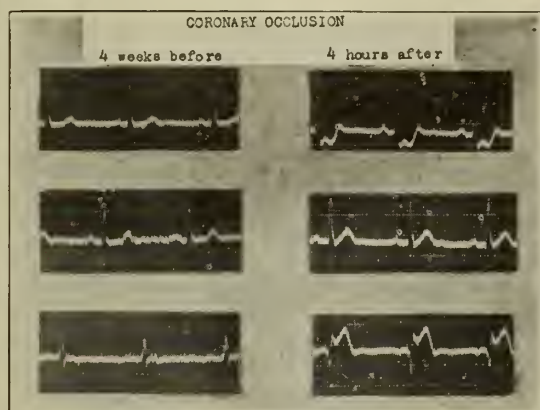
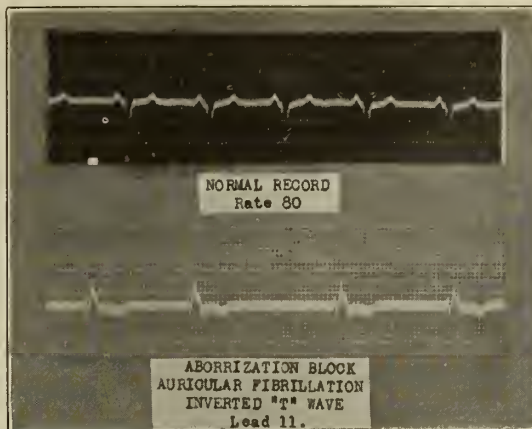
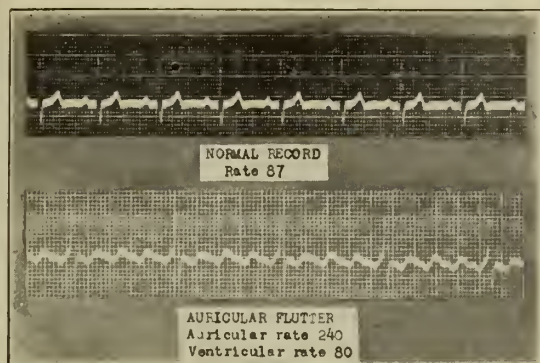
Ventricular tachycardia is not an uncommon event and its occurrence is being recognized with increased frequency. In 1928 there were only sixty cases reported in the literature and at the present time there are probably one hundred. A positive diagnosis

of ventricular tachycardia cannot be made without an electrocardiogram. It should always be suspected during digitalis administration if there is a sudden increase in heart rate. Occasionally it is seen in advanced myocardial disease not associated with digitalis therapy. Tachycardia of this origin is usually accompanied by a marked degree of circulatory collapse and a patient seldom survives more than a few hours unless normal rhythm is restored. This condition is one of the very few indications for the intravenous use of quinidin sulphate.

In differentiating other forms of tachycardia the electrocardiogram is often of great value. Auricular flutter like ventricular tachycardia may be suspected, but it cannot be positively diagnosed without the aid of a tracing.

This paper, up to the present time, has dealt only with conditions involving a disturbance in rhythm of the heart. It is in this field that the electrocardiogram is of most value. Recently it has been shown that we may use it to advantage in conditions involving the myocardium even though the rhythm remains regular. The most important of these is occlusion of the coronary arteries. The electrocardiographic changes associated with this condition are usually quite characteristic and when present serve as a positive diagnosis. Repeated records on the same individual with coronary disease afford a valuable index to the progress of the disease process.

Case 4. Illustrating a differential diagnostic problem in CORONARY OCCLUSION. M. H., a white male of 49 years, had a chronic phlebitis of the right femoral vein for seven years. In January, 1931, two days before admission to the hospital, he experienced sudden pain in the right chest. The severity of this pain was increased by inspiration. Shortly after the onset he expectorated a small amount of dark blood. The day of admission to the hospital he suddenly developed a sharp, non-radiating pain in the precordial region. On examination he was an ashen grey color, the blood pressure was very low and the heart rate was 150 per minute and regular. There were a few fine and medium moist rales at the lung bases but no definite change in the character of the breath sounds. This clinical picture presented a differential diagnostic problem of coronary occlusion or pulmonary infarction. Six hours after admission a loud pericardial friction rub was heard. Twelve hours after admission an electrocardiogram was made and the changes found were suggestive of a coronary accident.



Thirty-six hours after admission a second electrocardiogram was made and the changes found at that time were very definite of an occlusion of the coronary artery. One week later the patient felt quite well and wanted to be up. Two weeks later a third electrocardiogram was made, which further corroborated the diagnosis of coronary occlusion. With this diagnosis definitely established, the patient was not let out of bed for five weeks.

This case illustrates several points of importance in the diagnosis and management of patients with coronary occlusion. First, the necessity of establishing a positive diagnosis. This can best be done by following the course of the disease with electrocardiographic records. One tracing will sometimes fail to show signs of coronary occlusion, especially if made during the first twelve hours of illness. Repeated records will almost invariably show changes characteristic of this condition. After the diagnosis is established the treatment is usually easy in uncomplicated cases. This patient had a rather marked degree of circulatory shock and the question of using digitalis and caffeine sodium benzoate were to be decided. If the patient had an occlusion of the coronary artery caffeine and digitalis were contraindicated as circulatory stimulants will sometimes cause sudden death by the rupture of a ventricle or the throwing off of an embolus. Morphine is the most valuable drug in the treatment of these patients. Sometimes very large doses are required to get the patient in a state of rest. The long period of

bed rest, so essential to one with a coronary occlusion, is in some instances difficult to insist upon without a positive electrocardiographic diagnosis. They should remain at absolute rest in bed for about six weeks in uncomplicated cases. Physical activity before this time subjects the patient to the danger of sudden death.

A differential diagnostic problem not illustrated by this patient, but sometimes seen and always of great importance, is that of patients with an ACUTE SURGICAL ABDOMEN OR CORONARY OCCLUSION with atypical pain radiation. Sometimes the two clinical pictures are identical and require an electrocardiogram for positive differentiation. Not a few patients have been operated upon and later found to have coronary occlusion. It must be remembered that the electrocardiographic changes sometimes will not appear during the first twelve hours of the disease and that repeated records must be made.

The electrocardiogram is sometimes of help in differentiating *gallbladder and coronary disease*. In studying these patients it cannot be too greatly emphasized to abstain from the use of intravenous gallbladder dyes. In a patient with coronary disease the intravenous administration of gallbladder dye will frequently cause coronary occlusion.

The diagnosis of *angina pectoris* is usually made in an individual past mid-life complain-

ing of precordial pain. These patients are usually given a few tablets of nitroglycerine and allowed to carry on with their daily routine. They often meet sudden death. It can be shown by studying these patients with the electrocardiograph that many of the anginal attacks, and especially the more severe ones, are due to a small occlusion of the coronary vessel rather than a spasm. Following an attack of this sort sudden death from embolism may occur at any time. It is all important that these patients should be correctly diagnosed and given a prolonged period of bed rest. This is well illustrated by the case to follow.

Case 5. Illustrates an incidence of a patient with CORONARY SCLEROSIS treated as angina pectoris. J. S. G., a white male of 53 years, was seen first in January, 1931, complaining of precordial pain for the past year and a half. He had up to this time been diagnosed and treated for angina pectoris. The pain was most frequently associated with exercise and after meals. It would originate in the epigastrium and radiate upward to the precordium, shoulders and neck. He experienced no sense of oppression of chest or fear of impending death. The attacks had recently become more severe and more frequent and he had been forced to abandon his work as manager of a coal yard.

On examination he was found to have a moderate degree of generalized arteriosclerosis. The blood pressure was 140 mm. systolic and 90 mm. diastolic, the heart rate was 84 per minute with regular rhythm. There was slight cyanosis of the ear tips, but no dyspnoea. The chest was moderately emphysematous but the lungs were clear throughout.

An electrocardiogram made at this time showed changes that were only suggestive of coronary disease. The patient was given four weeks of bed rest and at the end of that time the electrocardiogram was repeated. The second record, made five weeks after the first one, showed definite evidence of an occlusion of the coronary vessel, which probably occurred about five weeks before. Following the period of bed rest precordial pain was less and the patient felt much better. He was advised not to attempt any work and to lead a very quiet and inactive life. Six weeks later, while attempting to perform his duties as manager of a coal yard, the patient was suddenly seized with a most excruciating precordial pain. When seen three hours later he had a mild degree of circulatory shock. The pain was very severe but without radiation. The blood pressure was 140 mm. systolic and 90 mm. diastolic. There was an occasional premature beat. An electrocardiogram was made at this time, which corroborated the suspected diagnosis of another coronary occlusion. This patient died suddenly six hours later. Autopsy was performed the following morning and there was found a complete occlusion of the anterior

circumflex coronary artery. There was also evidence of rather advanced coronary disease and some scarring of the myocardium.

Widespread damage to the heart muscle from CHRONIC MYOCARDIAL DISEASE sometimes causes marked changes in the electrocardiogram. The alteration in the form of the electrocardiogram in this type of lesion is due to a destruction of certain parts of the conducting system, usually the Purkinje fibers. Sometimes the disease process may involve one of the main branches from the bundle of His thus giving rise to a bundle branch block. This can only be diagnosed by the electrocardiograph and when found it is significant of rather advanced myocardial disease.

We may now turn to a discussion of the value of electrocardiography in patients with *valvular or pericardial disease*. Much less is known of the significance of changes in the record which occurs in this type of disease. Occasionally we may see minor changes in the electrocardiogram as an abnormal axis deviation or slight changes in the shape of the complexes, but these are not characteristic of any particular lesion and their significance is equivocal. Unless there is involvement of the cardiac muscle secondary to valvular or pericardial disease there will be no characteristic changes in the electrocardiogram. When adhesive pericarditis is suspected the electrocardiogram may be of value in proving the diagnosis by demonstrating an inability of the heart to shift its position as the patient is rotated.

Summary

By case reports we have attempted to demonstrate the clinical use and value of the electrocardiogram. It should be a routine part of the examination of every patient with heart disease or suspected heart disease.

In the differential diagnosis of arrhythmias we have demonstrated incidences where its use has been of great value, viz.: heart block, auricular fibrillation, and premature beats.

In differentiating the tachycardias, the benign type originating in the auricles and the more malignant type arising in the ventricles, has been discussed.

We have also outlined cases illustrating its value in the diagnosis and management of patients with coronary disease and chronic myocardial disease.

DERMATOLOGY*

Clinic

HOWARD HAILEY, M. D.
Atlanta

The patients to be presented this afternoon have been treated with radium.

In cases one and two, there was hemangioma of the cavernous type. Every doctor is called upon to decide what is to be done in the treatment of hemangiomas (birthmarks).

Hemangiomas may be classified as port-wine, strawberry and cavernous types. The port-wine type should never be treated with

properly used, is the treatment of choice. It is most important to avoid reactions. In selected cases and on selected portions of the head and body, strawberry marks can be de-



Figure 1.
Case 1. B. S., age 4½ months. Cavernous hemangioma.
Began treatment, November, 1925.



Figure 2.
Case 1. B. S., 5½ years after radium treatment.

radium. In selected cases lesions are benefited by ultra violet light under pressure. However, intensive treatment is necessary. In the strawberry and cavernous types radium, if



Figure 3.
Case 2. L. R., age 15 months. Cavernous hemangioma
right forehead. Began treatment May 8, 1923.



Figure 4.
Case 2. L. R. Result as shown 8 years after
radium treatment.

stroyed by the use of a hard object, as a button, to compress the blood vessels. The compressing object is strapped in place by adhesive tape. Elastic adhesive is preferable in some cases. To obtain desired results the lesions must be treated early. This statement applies to all methods of treatment. In hemangiomas which are ulcerated I have

*Informal clinic before the Medical Section of the Medical Association of Georgia, Atlanta, Ga., May 13, 1931.



Figure 5.
Case 3. B. C., age 42. Squamous epithelioma of lower lip. Treated with radium, December, 1927.



Figure 7.
Case 4. O. A. R., age 52. Squamous epithelioma of lower lip. Treated with radium December 10, 1930.



Figure 6.
Case 3. B. C. Result 3½ years after treatment.



Figure 8.
Case 4. O. A. R. Result 8 months after treatment.

been impressed by the fact that healing of the ulcer takes place rapidly following very short radium treatments.

Allow me to urge you to advise parents to have hemangiomas treated as soon as they appear. By doing so less treatment is necessary and the cosmetic result is always better. It is true that a small percentage of hemangiomas disappears spontaneously. However, the number is not sufficient to justify advising patients to "leave them alone" or postpone the treatment.

In cases three and four there was squamous-celled epithelioma of the lower lip. These patients were treated with radium, using the cross-fire technic. Iridio-platinum needles, containing radium element, were buried in the lip beneath the tumor. A full strength radium plaque was placed above the tumor. Radium, filtered through brass, was placed over the submental glands. This is a prophylactic measure

which enters into my technic. Neither of these patients had radiation over the glands of the neck.

There has not been enough evidence presented to justify routine surgical removal of glands in the neck. In all cases of cancer of the lip which I have treated and seen treated during the past ten years, the cervical glands have been enlarged—usually greatly so. After the cancer has been apparently cured it is interesting to observe the rapid reduction in size of the regional glands. I believe in the vast majority of cases, the enlarged glands are the result of secondary infection in the lip lesion and hold this opinion unless proven incorrect. It has been my observation that when metastasis has taken place in the glands of the neck, any treatment as a curative agent is of doubtful value.

I wish especially to call your attention to the cosmetic result in these cases. The cases

presented were all treated in the office. Hospitalization is not essential in the management of early cancer of the lip.

803-4 Candler Building

RESULTS OF SURGERY IN THE TREATMENT OF TUBERCULOSIS OF THE LUNG*

Clinic

FRANK K. BOLAND, M. D.
Atlanta

Rest is the feature of treatment which has contributed more than anything else to the successful management of tuberculosis of the lung. Temporary rest is afforded in a simple manner in many cases by pulmonary collapse induced by artificial pneumothorax. This is the safest means of causing mechanical rest of the lung, and is a method which should not be abandoned for more radical treatment so long as it produces material improvement. The presence of pleural adhesions, however, becomes an obstacle to the efficiency of artificial pneumothorax in certain cases. Such adhesions may be divided by cauterization through the thoroscope, as suggested by Jacobaeus, and as practiced so extensively by Matson, of Portland, Ore. The danger of the procedure, however, appears to bar it from universal adoption.

Three principal methods of permanent pulmonary collapse are advocated: (1) extrapleural pneumolysis; (2) phrenicectomy; and (3) extrapleural thoracoplasty. Extrapleural pneumolysis consists of the separation of the parietal pleura from the chest wall, thus enabling the underlying lung to collapse. The space formed between the parietal pleura and the chest wall is filled by some foreign substance such as paraffin, fat or muscle. The operation is done most often to collapse the apex, when it is called apicolysis. At the present time this procedure is not the choice of many surgeons.

Phrenicectomy and extrapleural thoracoplasty are the agents of collapse which enjoy the widest application. No attempt will

be made to discuss every detail of these methods of treating tuberculosis, but mainly to give the results of personal experience, with the demonstration of one patient. Brief comment will be made on seven patients treated by phrenicectomy alone, and five treated by phrenicectomy plus thoracoplasty.

The object of excising a portion of the phrenic nerve is to cause paralysis of the corresponding half of the diaphragm, with subsequent elevation of the muscle and proportionate collapse of the lung. The effectiveness of the operation depends upon how much of the nerve, with its accessory branches, is removed. Since the two phrenic nerves communicate with each other across the midline in the thorax, and since the diaphragm also is supplied through branches of the intercostal nerves, it is not to be expected that phrenicectomy will produce complete paralysis of the diaphragm, although Davies quotes Pruder as reporting a case in which evulsion of the nerve caused the diaphragm to rise as high as the second rib.

The anatomies state that an accessory phrenic nerve joins the main trunk below the root of the neck in from 20 to 30 per cent of cases. Since this branch rarely is included in evulsion of the nerve, the results of phrenicectomy are variable. Some writers do not believe that diaphragmatic adhesions will prevent elevation of the muscle following excision of an ample section of the nerve, but our experience seems to prove the opposite.

Usually the operation is performed with but little difficulty. A point not often stressed is the position of the patient's head. If the head is turned far to the contralateral side, the scalenus anticus muscle may be rotated on itself mesially so as to bring into view objects which belong on its lateral side, and not the phrenic nerve, which lies on its anterior surface. The head should be turned only slightly from the midline. Failure to anesthetize the nerve before severing it may cause considerable pain. The phrenic nerve is two-thirds motor and one-third sensory.

In this series of twelve phrenic nerve evulsions the diaphragm rose to an appreciable degree in half the cases, and corresponding improvement was noted. In the other cases

*Informal clinic before the Surgical Section of the Medical Association of Georgia, Atlanta, Ga., May 13, 1931.



Figure 1.
Showing pulmonary tuberculosis of left lung with large cavity in upper lobe. Note low position of left diaphragm. Cause of elevation of right diaphragm not known.



Figure 2.
Showing elevation of left diaphragm after excision of 20 centimeters of phrenic nerve. Note reduced size of cavity as compared with Figure 1.

the diaphragm did not rise, and there was no change in the condition of the patients. In two cases failure was attributed to the presence of diaphragmatic adhesions; in the other three the nerve broke before as much as 8 cm. could be twisted out. The improvement was manifested first, by the greater ease of expectoration, followed by the amelioration of all other symptoms. The patients had less fever and cough, and in one case positive sputum disappeared. All the operations were done at the request of attending medical men. Better results will follow the treatment when it is instituted earlier in the disease, and not used, with thoracoplasty, only as a last resort.

Figures 1 and 2 show the effect on the diaphragm of excision of 20 cm. of the phrenic nerve, with the decrease in size of a large cavity in the upper lobe of the left lung. The diaphragm rose 12 cm. The patient had been sick two years when she was operated upon in July, 1930. The maximum rise of the diaphragm was attained in two months; in other cases the diaphragm may continue to rise for a longer time. The patient is still under sanatorium care, and may become a candidate for extrapleural thoracoplasty.

The object of extrapleural thoracoplasty is, by the excision of sufficiently long rib segments, to col-

lapse the chest wall to such an extent as to compress the diseased lung completely and permanently, and thus destroy all suppurating spaces, put the lung at rest, and reduce it to a non-functioning fibrous mass. Naturally, an operation of such magnitude is not to be performed upon a lung that has not already ceased to function for the good of the patient, but is acting only as a warehouse of infection to terminate in premature death. The operation is absolutely contraindicated unless the opposite lung is practically free of the disease. To find the opposite lung perfectly normal cannot be expected. The use of the electrocautery knife is recommended, in order to minimize the loss of blood.

The success of extrapleural thoracoplasty depends upon performing the right operation upon the right patient at the right time. By the right operation is meant especially not doing too much at one time. While probably more complete collapse is obtained by finishing the operation at one time, few tuberculosis patients are prepared to withstand such an extensive procedure. Two or more sittings are safer. The right patient and the right time must be decided by the internist, but it is to be hoped that the future will induce even the conservative medical man to invoke the aid of surgery sooner than has been done in the past.

One would prefer to use local anesthesia exclusively in these cases, but many of the patients, on account of nervousness and fear, are not good subjects for local anesthesia, and gas or ether has to be added. It has been a debated point as to whether the upper



Figure 3.
Showing well-advanced tuberculosis of right lung with trachea and mediastinum well drawn to the affected side.



Figure 4.
Showing tuberculosis of left lung with trachea practically in midline.

ribs or the lower ribs should be removed first, and it seems logical to decide that if the upper half of the lung is more diseased the operation should begin above, whereas, if the lower half is more diseased the operation should begin below. Eventualities may prevent more than the first stage ever being done, so that it is well to make sure of collapsing the worst part of the affected organ.

Besides having the patient in the best general condition, with the least possible activity in a unilateral lesion, it is an universally accepted rule that the roentgenogram must demonstrate fibrous and scar tissue formation as shown by the mediastinum and its contents being drawn toward the affected side. This condition is well manifested by the displaced position of the trachea. Such fixation of the mediastinum is supposed to prevent collapse of the heart and mediastinal flutter when the lung is collapsed.

These desiderata were present in the five cases, except one, in this series, which were subjected to thoracoplasty. In the case excepted the trachea was in the midline, but the patient was one of the two to recover. We believe that collapse of an already weakened heart is the commonest cause of early death after the operation. Shock, hemorrhage and infection, though they may be troublesome or alarming, rarely are responsible for a fatal result. Pneumonia and other pulmonary complications seldom cause death.

So, the roentgen picture of mediastinal fixation does not always promise a favorable outcome. Figure 3 shows a case of well advanced pulmonary tuberculosis with the trachea drawn toward the side of the disease. The patient had been sick three and a half years, and

recently had had serious hemorrhages. Artificial pneumothorax was attempted without success, and it was thought that phrenicectomy would do but little good on account of diaphragmatic adhesions. With medical approval, extrapleural thoracoplasty was performed in two stages, ten days apart, with satisfactory immediate postoperative results. The fourth day after the last sitting the patient's heart suddenly became weak and rapid, and he died a few hours later. There was no evidence of pulmonary complications. Unfortunately no necropsy was obtained.

On the other hand, Figure 4 is the roentgenogram of a fairly unilateral case in which the trachea is in the midline. The patient had been sick four years, and artificial pneumothorax was unsuccessful on account of pleural adhesions. The excision of 9 cm. of the phrenic nerve caused no elevation of the diaphragm. In August, 1930, extrapleural thoracoplasty was performed in three stages, and apparently the patient is now on the road to comparative recovery. She is better in every way, and has but little cough or sputum. Occasionally tubercle bacilli are present. Figure 5 is the roentgen film taken after the second stage of the thoracoplasty, when sections of the upper six ribs had been removed. The falling-in of the upper ribs is shown. The patient is still under strict sanatorium supervision, and a film following the last operation, which should demonstrate complete pulmonary collapse, has not been taken. (Since the paper was written, a final film has been taken, but the collapse is not as complete as was expected, due to failure to strap chest.)

The histories of two other patients who died are



Figure 5.
Roentgenogram taken after first stage of thoracoplasty. The trachea is well shown in the midline.



Figure 6.
Showing tuberculosis of left lung with trachea well drawn to the affected side.



Figure 7.
After completing thoracoplasty, trachea being in midline.



Figure 8.
Showing scar three years after operation. Note lack of deformity.

similar to the first case. Both were young men; one had been sick seven years, and the other one had been sick five years; artificial pneumothorax had failed in both cases. Phrenicectomy was performed, with but little effect. Roentgenograms showed mediastinal fixation in both patients, with the trachea pulled toward the diseased side. Thoracoplasty was performed in two stages, with the same results recorded in the first case. Three or four days after the last sitting, the patients suddenly succumbed, apparently from heart failure. Necropsies were not done.

Figure 6 shows the chest of a young woman who had been a tuberculosis subject and totally incapacitated for seven years. The trachea is drawn toward the affected side. Artificial pneumothorax proved ineffective; and phrenicectomy produced but little result. Before extrapleural thoracoplasty was performed, in two stages, in 1927, she presented typical symptoms of moderately advanced tuberculosis in the upper part of the left lung, with cavity formation, and beginning involvement of the upper part of the right lung. She had positive sputum, sweats and fever, and was anemic and had lost considerable weight. Her general condition was fair, however, and with the slight involvement of the contralateral lung, surgical collapse of the more advanced lung seemed indicated. She stood the operative procedures well, and proved an ideal patient in every way. Today she is able to work, has put on much weight, and looks and feels well. Occasionally she has some cough and sputum, but never any fever or positive sputum. Figure 7 shows the collapsed chest as it is today, with only a narrow inconsequential shadow of air in the apex. Figure 8 is a photograph of the patient's back, demonstrating the scar and small amount of scoliosis, which is scarcely perceptible through her clothing.

While the treatment of pulmonary tuberculosis by surgical collapse still leaves much to be desired, the results have been encouraging, especially when the class of patients under treatment is considered. The average mortality rate following thoracoplasty is less than half the 60 per cent given in these five cases, and will be much lowered with better selection of cases for operation and with improved technic. The patient should always be under the care of competent phthisiologists, before and after surgical treatment, and ill-advised operations by over-zealous surgeons should be discouraged. Scar tissue formation and fibrosis should prevent mediastinal collapse following thoracoplasty, but apparently a heart which has suffered the strain of several years of active tuberculosis infection, often is too weak to survive the degree of collapse which must result from every operation of such extent.

—S. M. A., New Orleans, Nov. 18-20.

THE CLINICAL VALUE OF THE SCHILLING BLOOD COUNT*

Clinic

ROY R. KRACKE, M. D.
Emory University

Clinical medicine has long depended upon the laboratory to render aid in its diagnostic problems. It is not within the province of this discussion to engage in the time honored controversy regarding the relative values and importance of laboratory procedures as compared with bedside medicine. Suffice it to say, however, that the relative efficiency of any laboratory procedure usually depends upon the type of examination that is being done, and the diseases upon which it may throw information. For example, the finding of malarial parasites in the blood stream of a patient suffering from a long continued and obscure fever, illustrates the scientific accuracy of a laboratory finding, and its superiority over physical findings, but only in that particular case. On the other hand, a thorough laboratory study, consisting of hours of work, may lead to no information in a case of another type.

In the average clinical laboratory, I would estimate that 40 per cent of all procedures carried out, are concerned with the examination of the blood. A large percentage of these consists of blood counts. The white cell and differential count are among the procedures that have always stood in the front rank of the reliable and valuable assets in diagnosis.

The chief value of a blood count lies in its widespread application; the internist and surgeon alike resort to it in solving diagnostic problems. There are few diseases in which the estimation of the total number and percentage of white cells is not of value. Therefore, any development or improvement of methods pertaining to such a laboratory asset should be used to advantage by the clinician. I feel that the presentation of the important factors relative to the latest of these, that is, the Schilling method of counting cells, should be of timely interest.

*Informal clinic before the Medical Section of the Medical Association of Georgia, Atlanta, Ga., May 13, 1931.

In a consideration of the various types of white cells, a thorough understanding and appreciation of the significance of percentage changes, is necessary. In order for one to interpret correctly differential counts, knowledge of the origin of the various cells is necessary. This is because certain diseases seem to affect only those cells manufactured by the bone marrow, others affect only those derived from the lymphoid system, while others affect those from the reticuloendothelial system.

It is now generally accepted that the chief source of supply and site of manufacture of all types of granular cells is in the bone marrow. The bone marrow in its entirety can be justly considered a far-flung and widely distributed organ. Whether the long bones, the short bones, or the flat bones are chiefly concerned in the manufacture of granular leukocytes is of little importance. It is probably true that the marrow of certain bones manufactures the granular cells under normal conditions, but in times of stress and strain and infection the system calls for activity from marrow that is at rest under normal conditions. The bone marrow has a tremendous reserve power and a remarkable capacity for emergency output of these cells.

There is no reason to separate large lymphocytes from small lymphocytes. All of these cells have their origin in the lymphoid system, and the differences in size merely represent various stages in growth. It has not been demonstrated that any disease causes an increased output of large lymphocytes without a coincident increase in the smaller forms.

There remains, then, only one other cell to consider, that is that type of cell variously known as a large mononuclear, transitional, endotheliocyte, monocyte, etc. From available evidence, this cell arises from the widespread reticulo-endothelial system, and any disease causing increased activity of this system, results in an increased percentage of only one type of cell.

From a study of the origin of white cells, it becomes evident that our classification is in a state of confusion, and that often failure to consider the origin interferes with the proper evaluation of the shifting percentages.

An ordinary differential cell count could well include only the following types:

Neutrophils
Eosinophils
Basophils
Lymphocytes
Monocytes

This point has been recently stressed by Boerner¹ and he believes that our nomenclature, describing variations and abnormal percentages, should be revised according to the following outline.

INCREASED NUMBER

Neutrophilia (Neutrophils)
Eosinophilia (Eosinophils)
Basophilia (Basophiles)
Lymphocytosis (Lymphocytes)
Monocytosis (Monocytes)
Leukocytosis (All leukocytes)

DECREASED NUMBER

Neutropenia (Neutrophils)
Eosinopenia (Eosinophils)
Basopenia (Basophils)
Granulopenia (All granular cells)
Lymphopenia (Lymphocytes)
Monopenia (Monocytes)

He further states that all cells, as enumerated in a differential count, should be expressed in absolute numbers and not in percentage. For example in a W.B.C. of 8000 and 60 per cent neutrophils, it should be reported as 4800 actual number of neutrophils per cu. m.m., and that all other cells of the count be expressed in a similar way. There is no doubt that much more information could be derived from such a plan, if proper study is undertaken to determine the range of normality of each type of cell expressed in actual numbers. Boerner¹ and his associates^{2, 3} advocate the use of what they term a nuclear index, estimated to express in a simple figure the activity of the neutrophilic resistance. It is doubtful, however, if such an index should be used, since it does not express the information that is available from a thorough study of the total count, differential count and Schilling count.

In our present methods of estimating the total number of cells, and the percentage of neutrophils, we often see patients in which the blood findings are not in accord with the clinical picture.

For example, a patient may present himself with the typical history and findings of

acute appendicitis, and the surgeon is much surprised to find that he has a white cell count of 7600 and 68 per cent neutrophils, and in many instances it creates such a strong element of doubt as to the correctness of the diagnosis that operation may be deferred for some hours or until such time that serious complications have resulted. It is in this type of case that the white cell count and differential count not only have failed to be of service but have done actual harm to the patient. In our zealous desire to give full credit to the scientific accuracy of the blood count, and in our tendency to overestimate its value, the question arises as to whether we might not have been just as well off these many years without the blood count in this type of case. It may have done more actual harm than good.

Using a case of suspected acute appendicitis as an example, let us consider the possible blood pictures that we may find. First, the total count may be high (15,000) with 85 per cent neutrophils. This type of blood reaction fits the clinical picture, and we believe that the count has been of diagnostic aid, and further believe that the prognosis is good since such a count indicates a fair degree of resistance. Then in a similar patient, we next find a blood picture of 8000 white cells and 90 per cent neutrophils, so it is decided that this patient probably has acute appendicitis as indicated by the high neutrophilic percentage, but we may feel that his reaction is not so good since his total count is only 8000. But in spite of this, the blood picture has been of considerable diagnostic and prognostic value.

The next such case, however, is that described above, in which the total count and differential count are both normal, and the findings, therefore, have no value, either in diagnosis or prognosis, and actually serve to render uncertain the clinical diagnosis that has been previously made. It is in this type of case that the Schilling classification of neutrophils finds its greatest usefulness, since study of the type of neutrophils will explain the apparent discrepancy between the clinical findings and blood picture.

Paul Ehrlich noted that there seemed to be some connection between the type of neutrophils and the presence or severity of an infectious process, and he stated that he believed the nucleus of neutrophils in infectious processes to be more rounded and less differentiated than normally. Arneth¹ observed this and on the basis of his observations evolved his famous Arneth's index. He observed that the neutrophils were more immature in severe infections and estimated their age on the basis of the number of lobes in the nucleus. In the succeeding years the use of the Arneth index has been abandoned, and the reason for this is now becoming apparent. In his classification of neutrophils he assumed that the one lobe nucleus represented the youngest form, and as the cell attained maturity the lobes increased in number, and he divided all cells into five classes on this basis. Arneth failed to include those cells which we now recognize as being still more immature than his youngest type of cell. In other words, his classification included chiefly those cells which have attained maturity, or he classified from the youngest adult to the oldest adult. Since we know that the youngest cells of Arneth's group are thrown into the blood stream normally, it becomes evident that the grouping is not based on sound principles.

Schilling,^{5, 6} working on the same principle, has devised a classification that includes all neutrophils from the infant cell, or myelocyte, to the oldest adult. The classification follows:

Myelocyte—Round nucleus, undifferentiated cytoplasmic granules.

Juvenile—Indented nucleus, more granule differentiation.

Band or Stab—Horseshoe nucleus, or band nucleus.

Segmented Cell—Two nuclear lobes, with connecting filament, and all older types with more lobes to the nucleus.

The classification is based on the known fact that the neutrophil, in its development, gradually evolves from a round nucleus, as seen in the myelocyte, through the indentation, band formation and finally separation of nuclear material. Under normal condi-

tions only the adult types are released into the peripheral blood, but when the bone marrow is called upon to supply an increased number of cells for the purpose of fighting invading organisms, it is characterized by the release of the immature types. Therefore it may be assumed that the more immature the cells, and the larger the number of these immature cells, the more severe is the infectious process.

All bone marrow does not react alike, and the reserve power to manufacture cells varies widely in different individuals. Since it has been shown that many of the immune bodies have their origin in the granular cells, it is possible that the variations in immunity of individuals lies in the number and type of cells produced by the marrow. It is also true that there is wide variation in the type, the virulence and the number of invading bacteria, and that some organisms elaborate substances that stimulate bone marrow, whereas others do not. So then, there are two extremely variable factors influencing the production of neutrophils in times of infection; the type of organism, and the capability of the marrow.

From a consideration of these various factors, it is reasonable to assume that in many individuals the infecting organism does not stimulate the marrow, or if it does, the marrow is unable to respond. When the marrow can not produce large numbers of mature cells, it responds as an unprepared nation at the outbreak of war—it sends a few, young, untrained cellular soldiers to fight the battle against the invading bacteria.

maturity generally indicates the severity of the infection.

Since Schilling first announced this study in 1924, it has been subjected to an extensive and severe critical trial, and over a period of seven years has gradually increased its field of usefulness. The count has been done routinely at the U. S. Naval Medical School for five years and the clinicians of that institution hold it to be of more diagnostic importance than the total count and ordinary differential count combined⁷.

Goodale and Manning⁸ have carefully observed it in a large series of cases of acute appendicitis and stress the diagnostic value. It has been further emphasized by Allen⁹. Kolmer¹⁰ has recently stated that the estimation of immaturity of neutrophils is of greater importance and practical value than both the total white and differential count.

At Emory University Hospital we have used the Schilling count in a large number of cases, correlating the findings with the clinical picture, and I believe it of more value than the total or differential.

Contrary to current opinion, the count is very easily carried out and the enumeration of cells can be easily included in the ordinary differential count. In doing this, we have adopted the following classification for our differential counts:

Myelocytes	Lymphocytes
Juveniles	Monocytes
Bands	Eosinophils
Segmented	Basophils

The following outline indicates the diagnostic and prognostic value of varying degrees of immaturity of the cells:

W. B. C.	Myel.	Juv.	Band.	Seg.	
12,000	0	0	0	80	Usual differential—Moderate infection
12,000	0	0	12	68	Schilling " —Mild infection
12,000	0	6	19	55	Schilling " —Moderate infection
12,000	1	29	20	30	Schilling " —Severe infection
12,000	5	39	27	9	Schilling " —Grave infection

The Schilling blood count reveals this situation in a simple study of the nuclear development. If the smear reveals that 20 to 30 per cent of the neutrophils are of the band and juvenile types, it can be safely assumed that the bone marrow is being subjected to marked stimulation, and the degree of im-

From a study of the above table, it is seen that a total count of 12,000 and 80 per cent neutrophils, may be widely interpreted, but the interpretations are of little value unless a Schilling differential study is made.

In denoting immaturity of neutrophils, the term "shift to the left" has come into wide

use while maturity is designated as a "shift to the right". Since these terms are general and relatively inaccurate I believe they should be abandoned.

In addition to the principles outlined before, Schilling made other observations in the course of his work, but the value of these may

Monocytes 5 0 0

On December 4th, operation revealed a gangrenous appendix with abscess.

Comment.—This case illustrates the value of the count in the case with a normal total count and normal neutrophilic percentage. In the first count, 50 per cent band-forms indicated a severe infection, as stated by Weiss¹¹.

LEUKOCYTIC PHASE DURING AN ACUTE INFECTIOUS DISEASE

W. B. C.	Baso.	Eos.	Myel.	Juv.	Bands.	Seg.	Lym.	Mono.	
Increased	0	0	0	16	8	56	18	2	(Phase of neutrophilic battle)
High normal	0	2	0	0	8	58	15	17	(Phase of monocytic defense)
High normal	0	7	0	0	4	34	42	13	(Phase of lymphocytic cure)

be questioned at this time. He stated that the leukocytic picture during the course of an infectious disease might be divided into three phases consisting first, of the neutrophilic battle phase, during which the immature neutrophils increased, eosinophils disappeared and monocytes decreased. As the infection was overcome the blood picture shifted to a relative decrease in immature neutrophils and absolute increase of monocytes, which he termed the phase of monocytic defense. This was followed by the phase of lymphocytic cure during which the lymphocytes and eosinophils were increased.

This may be shown by the following example:

Schilling has also stressed the point that the neutrophils are usually found to be over-mature in pernicious anemia. I have not found this to be true in all cases of this disease that I have studied.

The following case reports, selected at random from two days' admissions at Emory University Hospital, will illustrate the value of the Schilling differential count in infectious diseases.

Case 1.—A woman, aged 37, was admitted November 27, 1930, complaining of nausea, vomiting, and pain in the right lower quadrant. There was tenderness in the regions both of the gallbladder and of the appendix. The temperature and pulse were normal.

The tentative diagnoses were:

1. Chronic appendicitis.
2. Pelvic inflammatory disease.
3. Subacute cholecystitis.

The blood counts were:

	Nov. 27	Nov. 28	Dec. 4
W. B. C.	9,100	12,000	12,000
Myelocytes	0	2	2
Juveniles	3	2	5
Bands	50	38	31
Segmented	20	49	42
Lymphocytes	22	9	20

Case 2.—A man, aged 51, entered the hospital on November 7th. He complained of loss of weight and afternoon fever of 101° for six weeks. He had been treated for malaria. Night sweats had occurred for two or three months. He had had abscessed teeth. Lymph nodes were palpable, and there was systolic murmur at the apex. The differential diagnosis involved pulmonary tuberculosis, malaria, septicemia. The fever ran a septic course, reaching 103° in afternoons. Various fevers, such as typhoid, undulant, etc., were suspected. Agglutinations were negative.

The Schilling count was:

W. B. C.	7,750
Myelocytes	0
Juveniles	4
Bands	32
Segmented	41
Lymphocytes	21
Monocytes	2

The above count showed a moderate immaturity of neutrophils, indicating a pyogenic infection. *Streptococcus viridans* was cultured from blood stream. The final diagnosis was general sepsis from streptococcic septicemia.

Case 3.—A woman, aged 20, entered the hospital with a history of nausea and vomiting for twelve hours. There was pain in the epigastrium, followed by localization in right lower quadrant. Temperature and pulse were normal. Impression was: chronic or subacute appendicitis.

W. B. C.	8,700
Neutrophils	63 per cent
Myelocytes	1
Juveniles	4
Bands	35
Segmented	29
Lymphocytes	35
Monocytes	2

This count indicated a severe acute infectious process. Operation revealed a swollen, congested, acutely inflamed appendix.

Case 4.—A woman, aged 32, entered the hospital complaining of pain in lower abdomen of four days duration. Slight midline distention and marked tender-

ness over both recti. Temperature 101, pulse 100. Impression 1: Partial intestinal obstruction. 2: Ovarian disease.

W. B. C.	8,250
Neutrophile percentage	71 per cent
Myelocytes	4
Juveniles	9
Bands	25
Segmented	33
Lymphocytes	24
Monocytes	5

Operation: Bilateral purulent salpingitis.

Conclusions

1. A summary of principles involving the production of white blood cells, is presented.
2. The efficiency of total white and differential counts is discussed.
3. The value of the Schilling differential count is an aid in diagnosis and prognosis is stressed.
4. Case reports bearing on the value of the Schilling count are presented.

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Discussion on Clinic of Doctor Kracke

Dr. Jack C. Norris, Atlanta, Ga.: The Schilling blood count, which, as Doctor Kracke has informed you, is an improved classification of the neutrophils regarding their age. The important factor is one's ability to recognize certain histological features which indicate a rapid formation of the polymorphonuclears. It is believed that when the polymorphonuclears are very immature that this indicates or suggests a stimulus which causes a rapid reproduction of these cells, presumably for protective reasons. In my experience this classification of the blood cells is practical and not infrequently gives the clinician, and more often the surgeon, very valuable information regarding the patient's resistance or the seriousness of an infection. It would seem that the Schilling count is coming into popularity and will soon be a routine laboratory pro-

cedure. There are a few facts that are necessary to be stressed.

The Schilling count should be made by those who have made a particular study of the polymorphonuclears and is practically valueless in the hands of the inexperienced person. The value of the count is often influenced by factors such as superimposed chronic infections or anemias and other blood dyscrasias, any of which may throw one in error when it comes to interpretation. I am not sure whether the Schilling count is applicable in all patients. Some people, I am certain, have an inherent ability to form very rapidly young leukocytes when the resistance of the patient may be indicated by a leukopenia. I have had this experience recently.

We are making arrangements to adopt the method in our laboratory.

Dr. Roy R. Kracke, Emory University, Ga. (closing): One point which I wish to stress is that the Schilling blood count is very easily made, either by a laboratory technician or by the physician. It can be done in a very short time, provided they learn to recognize these four types of cells. I think the Schilling count should be included routinely in all blood counts, so that instead of having only the two factors we will have the third and most important factor, which has to do with the immaturity of the neutrophils. It is in those cases where we suspect some infection that does not show the increased blood count, or the increased neutrophils, that the Schilling count has its greatest value. I think the count is well established in the laboratories of the country at present, and if we fail to take advantage of the knowledge we may gain from this count we are not availing ourselves of a new and important diagnostic aid.

EMORY EXTENDED TEACHING PRIVILEGES IN THE GRADY WHITE UNIT

Medical control and supervision remain in the white staff, under direction of the Board of Trustees, as heretofore, and all teaching in the white unit will be done by members of the white staff. Emory does not seek control.

There will be no change in management. Emory University, Medical Department, has had medical supervision over the colored unit of Grady Hospital for several years, and in such capacity has rendered splendid service to the patients in that unit. The best interests of the students, the University and the public, however, require that the student also have access to the wards of the white unit. Purely in the interest of medical education, the Board of Trustees feel it their duty to cooperate with Emory to the extent of granting teaching privileges in the wards of the white unit, the teaching to be done by such members of the white unit staff as Emory

may select. This will not mean any change in medical control or supervision. It does not take from the members of the white staff any of the privileges or opportunities they have heretofore enjoyed, and neither does it bring into the white unit doctors who are not members of the white staff. Emory has nothing to do with the appointment of members of the white staff, but under this new agreement, Emory will make individual arrangements with different members of the white staff to teach students of the medical school in the white unit, such arrangements to be acceptable to the Board of Trustees. This is all Emory has requested.

Without doubt the new agreement with Emory will mean a decided forward step in advancing medical education in the Southeast, and will benefit not only Emory, but the white unit as well.

White Unit Staff and Emory

Agreement reached between the Staff of the white unit of Grady Hospital and Emory University School of Medicine for the extension of medical school activities into the white hospital.

For several weeks consideration and discussion to this end have been under way through the Liaison Committee appointed by the President of the Board of Trustees to establish harmony and co-operation between the various units of Grady Hospital. Mr. Arthur I. Harris, a member of the Board of Trustees, acted as chairman of this committee. The other members of this committee are Dr. Frank Eskridge, representing the white unit; Dr. J. J. Clark, representing the Emory Unit; Dr. M. L. Boyd, representing Steiner Clinic.

The plans ultimately agreed upon were finally ratified at luncheon at the Athletic Club on August 15, at which time were present Mr. Harris, representing the Board of Trustees and Chairman of the Committee; Dr. W. A. Upchurch, President of the Staff of the white unit; Mr. J. B. Franklin, Superintendent of the Grady Hospital; Dr. R. H. Oppenheimer, Dean of the Medical School; and the visiting members of the white unit who are concerned with the first steps to be taken to extend teaching into the white hospital. These are Dr. J. H. Hines, who is also Chairman of the Executive Committee of the white unit; Dr. T. C. Davison, Dr. A. M. Dimmock, Dr. Frank Eskridge, Dr. George Fuller, Dr. Ben Clifton, Dr. W. H. Hailey, and Dr. E. S. Byrd. Dr. LeRoy Childs was unable to be present because of his absence from the city.

Under the plan finally agreed upon, the School of Medicine is to appoint certain visiting members of the white unit, together

with one of their associates, to positions in the faculty of the School of Medicine; they will receive students from the school for instructions in the wards of the white hospital. The following appointments were made for the coming year:

In Surgery—Associate Professors of Clinical Surgery: Dr. LeRoy Childs, Dr. B. H. Clifton, Dr. T. C. Davison, Dr. George Fuller.

Instructors in Surgery (teaching assistants, respectively to the men named above): Dr. J. G. Riley, Dr. W. S. Dorrough, Dr. Edgar Boling, Dr. Henry Poer.

In Medicine—Associate Professors of Clinical Medicine: Dr. E. S. Byrd, Dr. A. M. Dimmock, Dr. J. H. Hines, Dr. C. W. Strickler (to fill vacancy caused by Dr. Thrash's death).

Instructor in Medicine (teaching assistants, respectively, to men named above): Dr. J. Richardson, Dr. Phil Stewart, Dr. E. B. Wood, Dr. J. C. Massee.

In Obstetrics—Associate Professor of Clinical Obstetrics and Gynecology: Dr. Frank Eskridge. Instructor in Obstetrics: Dr. C. Hunter.

In Dermatology—Associate Professor of Clinical Dermatology: Dr. Howard Hailey. Instructor in Dermatology: Dr. H. S. Alden.

The clinical teaching of the white unit, begun in this way, will undoubtedly be augmented from time to time with the appointment of other members of the white unit staff.

J. B. FRANKLIN, *Superintendent,*
Grady Hospital, Atlanta.

—Bulletin of the Fulton County Medical Society, Atlanta, September 3, 1931.

CANCER*

Chapter IV

J. L. CAMPBELL,† M.D.
Atlanta

Cancer is an independent new growth of tissue cells which have reverted to the primitive or embryonic type and have lost their relation to the laws governing the processes of body growth. In order to visualize the meaning of this definition, we must explain that the body is made up of individual units called cells, just as a building is made up of units—brick or stone. The expression "primitive or embryonic" refers to the body cells before birth. These cells have certain

*This is the fourth of a series of seven articles on the cancer problem in its relation to public health written by Doctor Campbell at the request of the Georgia State Board of Health. Succeeding articles will be published in the Journal.

†Chairman of the Cancer Commission of the Association.

peculiar characteristics, principally rapid growth, that is lost at birth when it gives way to function.

The cause of cancer has not been definitely determined. However, we know a number of contributing causes which may be eliminated, thereby preventing the development of cancer in some parts of the body. In other organs we are powerless to inhibit its growth.

Chief among these contributing causes is chronic irritation. This may be mechanical or chemical: a broken tooth cutting the edge of the tongue or the irritating effect of nicotine on the mucous membrane of the mouth and throat in those who use tobacco to excess. A very malignant type of cancer often develops in the margin of deep, irregular scar or in a chronic ulcer or erosion which is subjected to repeated trauma. Certain types of moles are known to be the starting points of a terrible form of cancer. In fact, we are familiar with many conditions which, if corrected, will prevent cancer.

Malignant tumors have a fairly fixed habit as to location in the body, so much so that we know almost to a certainty where to look for them. The age of the patient is another important feature. There is not one chance in a thousand that a tumor located at a definite point in an individual under 25 years of age will be cancer, whereas a tumor in the same location in one past 40 is almost certain to be malignant.

Again, there exist certain well known lesions which are recognized as precancer and may be permanently cured by simple means, if properly applied in time.

It has never been proven that cancer is hereditary. Yet, any one of the predisposing causes enumerated above may be more likely to produce cancer in an individual inheriting a susceptibility to malignancy. This has been fairly well proven by Dr. Maude Slye, working with mice in her extensive laboratories in Chicago. A single blow may call the individual's attention to a pre-existing lump; but it is doubtful if cancer was ever caused in this way. Bad blood will not cause cancer. Although one suffering from a blood disease may have cancer, there is no proof that the blood taint was a causative factor.

Certain forms of cancer develop among workers in dye factories and places where the skin is subjected to the effects of coal tar. In fact, a recent "cause of cancer" could only be induced to work after the skin had been subjected to the repeated application of tar. Chimney sweeps in England develop skin cancer in the folds of their bodies where the soot accumulates.

In subsequent chapters we will discuss more at length the causes which may be eliminated from certain portions of the body, thereby precluding the development of cancer.

CANCER*

Chapter V

J. L. CAMPBELL,† M.D.
Atlanta

Half of the deaths from cancer are caused by lesions of the digestive tract, which includes the mouth, gullet, stomach, small and large intestine with their accessory glands, the liver and gall bladder, and the pancreas. In different parts of the canal the age and sex incidence varies greatly; nevertheless, a little study on the part of the medical practitioner will enable him to become so alert that certain symptoms will arouse his suspicions sufficiently to cause a thorough investigation.

It would seem unlikely that any one suffering with a cancer of the mouth would neglect it until it is beyond cure. But, such is often the case! Cancer is very rare on the upper lip; on the lower lip it has the appearance of a fever blister. A man past 45 who smokes should never neglect such a sore for more than two weeks. It will not give as much pain as a fever blister, but it will not yield to ordinary treatment. A simple, scaly spot may ultimately become a cancer. A sore on the edge of the tongue opposite a rough or broken tooth, especially in a man who uses tobacco, should be carefully treated. A white spot on the tongue will more than likely develop into a cancer. Another favorite spot is in the angle between the tongue and the pillar of the tonsil, or in the angles between the cheeks and the gums where a dental plate may press.

Cancer of the mouth makes up about 5 percent of the whole number in the body. They are most often seen in men past 45 who use tobacco to excess or who do not care for their teeth, and may be prevented by proper oral hygiene.

Cancers sometimes occur in the throat and gullet; they are very common in the stomach and are found about equally in the two sexes. Almost always they are located at the little end of the stomach, just where it empties into the small intestine. The first symptoms are sour stomach coming on about one-half

*This is the fifth of a series of seven articles on the cancer problem in its relation to public health written by Doctor Campbell at the request of the Georgia State Board of Health. Succeeding articles will be published in the Journal.

†Chairman of the Cancer Commission of the Association.

to two hours after meals. If an individual who has never had digestive trouble begins to suffer from indigestion about the age of 40 or over, it is his duty to see his family medical adviser at once and have a thorough examination. X-ray will often reveal a cancer of the stomach early enough for a cure.

Many cancers are located in the gall bladder and pancreas. The former are nearly always the result of neglected gall stones and may be prevented; but for those in the pancreas there is no known cause nor successful treatment. Fortunately primary cancer in this location is rare.

Primary cancer of the liver is extremely rare, but it often occurs as a secondary or metastatic lesion and always terminates fatally. For some unknown reason, a primary carcinoma in the small intestine is never soon; various theories to account for this have been suggested, but none has been proven. In the large intestine they are quite common, even beginning with the appendix. They are located at different points with fairly regular frequency and give sufficient warning of their presence, if one knows how to interpret the signs. However, many patients consult their physician with obstruction as the first symptom noted. In the majority of cases loud rumbling rounds will be heard. There will be loss of flesh, and pain due to the harrowing of the lumen of the intestine. When located near the terminal end, dysentery is often present.

Remember that cancer of the mouth is found chiefly in old men who use tobacco and are not careful with their teeth. Cancer of the stomach may be found both in men and women from 40 years of age and over. Cancer of the gall bladder is more common in women fat, fair and forty, because they more frequently have gall stones. In the large intestine the age incidence is somewhat earlier.

If people will select a medical advisor and consult him early when in trouble, much suffering can be avoided and, in many cases, life can be saved or prolonged.

NEW MEMBERS FOR 1931

Boswell, Charles, Atlanta
Daniel, John W. Jr., Savannah.
Eskridge, Frank, Atlanta.
Kilpatrick, Charles M., Augusta.
Klausman, Marcus, Atlanta.
Martin, W. B., East Point.
Ponton, T. R., Augusta.
Read, Joseph C., Atlanta.
Sandison, J. Calvin, Atlanta.
Smith, J. Allen, Macon.
Starr, H. J., Atlanta.
Trimble, W. H., Atlanta.
Upchurch, Wilborn E., Atlanta.
White, George M., Rockmart.

DIVISION OF VENEREAL DISEASE

Instructions for Patient, Approved by the State Board of Health

The Law Requires That These Instructions Be Given the Patient

GONORRHEA

Personal Advice to Patient

1. Your disease is infectious, or "catching", by other means than by sexual intercourse.

2. It may be transmitted to any mucous surface through contact with the discharge from the urinary canal.

3. Never permit the slightest opportunity for other persons to come in contact with these discharges, or with anything contaminated by them.

4. To avoid this, follow these rules:

(a) Wash the hands thoroughly with soap and hot water after every urination or other handling of the diseased organs. Remember, by one such act of carelessness you may carry the infection on your fingers to your own eyes and expose yourself to the risk of becoming blind.

(b) After washing the hands, do not merely rinse the basin or lavatory; wash it thoroughly with soap and hot water, and preferably follow by an antiseptic solution of known strength, as advised by your physician.

(c) The same care should be taken in washing bath tubs. The use of public bath tubs is prohibited. Never use any bath tub immediately preceding another person.

(d) Always have your individual towel. The use of the common towel is a prolific cause of gonorrhea infection of the eyes. Don't expose others to the risk of blindness.

(e) Protect the clothing and underclothing against soiling by use of proper dressings. Soiled clothing should be laundered separately; or, if impracticable, soiled portions should be immersed in boiling water or an approved antiseptic solution before being added to other laundry.

(f) All dressings must be burned. Never leave them where they are accessible to flies.

(g) Exercise care to prevent soiling of toilet seats by discharges.

(h) Sleep alone. Have no sexual intercourse. You will not wish to be charged with causing the loss of health, or possibly the death, of any person.

(i) Follow your physician's advice until he assures you there is no longer danger of your transmitting the disease.

(j) Do not be led astray by promises of hasty cure by advertised drug-store remedies. Cheap cures make miserable lives and often expensive funerals. You gain nothing but bitter experience by deceiving yourself, and you risk the injury to those nearest and dearest to you. Play fair with yourself and with others.

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA
Devoted to Welfare of Medical Association of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

OCTOBER, 1931

THE HISTORY OF MEDICINE IN GEORGIA

Have you ever visited a historic city and have someone point out the very spots on which memorable deeds were done? If so, how your memory flew back to your school boy days, trying to recount just a few of the high lights of history that had all but escaped your memory—and how you wished that you had taken the time to have at least read your guide book, that you might not appear entirely dumb concerning things any school boy ought to know.

Again, have you had a distant friend visit your city and ask to be shown the points of historic interest? Could you act as guide and give an intelligent description of those places, or would you have to inquire where at least half of them were and be embarrassed by your visitor having to relate the history of the other half?

I have been humiliated both ways. One week spent in Philadelphia convinced me that I could read the history of American independence with a new interest and new understanding. A friend visiting my own home city asked, among other points of interest, to be shown the home of Frank L. Stanton. When I found out where it was I had no trouble in showing it to him!

A few years ago certain of the leading physicians of the Medical Association of Georgia, realizing the lack of a medical history of Georgia, introduced a resolution in the House of Delegates looking to the preservation of the Medical History of Georgia. A committee was appointed and after years of persistent work and untiring energy, data were collected from every section of Georgia pertaining to the medical attainments from Colonial days to the present time.

This committee, backed by the Medical Association of Georgia, secured the services of Dr. J. P. Corry, associate professor of

History at Emory University, and a son of one of our Georgia physicians, to write this history. Special chapters have been given to certain periods of our Medical History, such as the Civil War period, and other chapters to such allied subjects as Public Health and Sanitation.

What a golden opportunity to inform ourselves of the achievements of our illustrious Georgia doctors. It is with great eagerness that I await my copy, that I may inform myself, and not be embarrassed by my ignorance of the men who made Georgia Medicine famous and the accomplishments that caused their names to be spread on the pages of history.

I trust every doctor in Georgia who has not already done so, will order his copy immediately that sufficient funds may thus be obtained to finish the printing. I consider this not only my duty in appreciation of the services so freely given by the Committee on History, but an opportunity to acquire a book for my library, that I can ill afford to be without.

W. A. SELMAN, M.D.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.

DISEASE AND THE TEETH

The modern enthusiastic search for focal infection by the physician and the layman has uncovered many obscure infections. The teeth and the gums have received their share of exploitation as harbingers of deadly bacteria which may throttle life. Having located the infection about the teeth it is a popular fad to advise removal of some or all of the teeth as the only means of eliminating the infection.

The wholesale extraction of teeth connected with pyorrhea pockets has frequently brought about the rapid decline of the patient, sometimes in so subtle a manner that death could hardly be attributed to the incident and yet subsequent events proved that

the extraction of the patient's teeth initiated the symptoms leading to his death.

Dr. C. H. Mayo is credited with the statement that "seventy-five per cent of human ailments come from what goes into the mouth including food and drink and the diseases of the mouth which cause local and general disease, and focal infection which may remain a cause of disease over a long period of time." This statement partially incriminates the teeth and gums and indicates how important it is to examine them carefully.

If a patient with severe pyorrhea is seen it seems that the rational thing to do would be to observe him over a sufficient time to properly evaluate the significance of his pyorrhea before advising dental extractions. If it is decided that all of the teeth must come out, it would seem advisable to advocate extracting them one at a time over a long period of time. This should lessen the shock and give the defense mechanism of the blood a chance to cope with the toxins released by the truma of extraction.

Bad teeth and missing teeth are responsible for many digestive diseases. Dr. William Lintz¹ in a study of 150 office patients with digestive diseases found that they had lost on the average 36.5 per cent of their teeth while a control group of normal people of about the same age relationship had lost only 17.2 per cent of their teeth.

Every diagnosis of chronic constipation, chronic appendicitis, peptic ulcer, gall bladder disease and cancer anywhere in the gastrointestinal tract should be accompanied by x-rays of the teeth for the eradication of focal dental infection will frequently obviate surgery.

Focal infection when found must be removed but we should consider well the patient and be most conservative in our method of removal.

E. A. BANCKER, JR., M.D.

1. Lintz, William: Digestive Diseases and the Teeth. *Ann. Int. Med.* 4:1188-1196. (March), 1931.

The Council has approved a change in the dates for the next annual session of the Medical Association of Georgia from May 10 to 13, 1932 to May 17-20, 1932. This authority is vested in the Council by Article VII, Section 1. of the Constitution, when the dates for our annual session conflict with the dates of the session of the American Medical Association.

MEDICAL ASSOCIATION OF GEORGIA*†

Medical organization develops efficiency, loyalty, confidence, and self-respect.—*McCord*.

Enter your name for membership if you are not an active member.—*Quarterman*.

Do we realize the enormous measure of opportunity in the physician's life?—*Fillilove*.

Insist on minimum criticism, for there is no antidote for it.—*Quarterman*.

Cultivate the art of medicine.—*Clark*.

Attain a fullness of your own soul by losing it to others.—*Thompson*.

Let every physician smile t.i.d., especially during the lean years.—*Bancker*.

Active membership in Medical organizations is a prerequisite to success; devotion to duty assures it.—*Sharp*.

Stay in the middle of the road and keep going.—*Bunce*.

Study, attend your Medical Association, and you will be greatly benefited.—*Coker*.

Our objective should be not to do the best that we can do, but to do the best that can be done.—*Lewis*.

Cherish your enthusiasms, but don't let any of them run away with you.—*Blackford*.

If our profession throws off lethargy, it will deal the quack a mortal blow.—*Myers*.

Act today! Trust little to the morrow.—*Roberts*.

The Medical Association of Georgia helps you more than you help it—think it over.—*Mulherin*.

In medicine, there should be an adequate balance between specialized knowledge and general information.—*Ayers*.

Organized medicine should map its own plans for charity service instead of permitting the organized public to use the former's constituents as tools.—*Thrash*.

Nothing can be done yesterday: be on the job today.—*McCurry*.

Osler's Magic Work of Medicine is still the magic work of modern medicine.—*Patterson*.

Fix your ideal on health, happiness, and usefulness.—*Redfearn*.

Give to your medical associations the best that you have and the best will come back to you.—*Roberts*.

Assist in every way to make 1931-1932 banner years for the Medical Association of Georgia.—*Quarterman*.

P. C. QUARTERMAN, M.D.

*Revised sentences from Radio Waves.

†Read down.

GEORGIA STATE NURSES ASSOCIATION

Officers

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 First Vice-President—Miss Dora A. Kershner, R. N., Macon.
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Headquarters

131 Forrest Avenue, N. E., Atlanta.

NURSING GOES TO THE JURY

The last two numbers of Hospital Management contain articles which every physician and nurse who have the responsibility of providing nursing care to the sick should read and ponder. Across their pages are invisibly etched the old query of Cain, "Am I my brother's keeper?" and the cartoon of the ostrich with its head in the sand. A reprint of the August article was sent by the State Committee on the Distribution of Nursing Service of the Georgia State Nurses' Association to the superintendents of all of the hospitals in Georgia. A copy will be furnished to any physician who cares to receive one.

The September article deals with the findings of the Grading Committee and sets out twenty questions to be considered in the consideration of the maintenance of a school of nursing. They are:

1. *Does your school give adequate basic clinical experience?*

At present the Georgia schools are required to provide an average daily census of twenty patients, or secure affiliations of six months to one year in a hospital averaging 100 patients daily.

At present there are fifteen hospitals that maintain schools of nursing where affiliation is required because the average bed occupancy is less than twenty patients daily, according to their own statements.

2. *Can you accommodate all your students on the smallest of the basic services so that all receive full training in them?*

Georgia schools are required to keep case reports where services are not segregated and standardized. However, it is the exception rather than the rule that these case reports are summarized and evaluated in actual days of experience and the results used in the assignments of students to

ward practice. Seemingly staff physicians who lecture to students in the subjects of medical, surgical, obstetric, or pediatric nursing, are not at all concerned to know or provide corresponding practical experience in such services.

The Georgia State Nurses' Association has requested the Hospital Committee of the Medical Association of Georgia to assist in increasing facilities for experience for student nurses in tuberculosis, mental disorders, pediatrics, etc.

3. *If your school affiliates, does it send students away only in the second or third years of training? . . . Does it try to join hands with neighboring schools in centralizing its resources for theoretical and practical instruction?*

Clearly Georgia nursing schools have not been able to command community resources for instruction, generally speaking. Physicians are working alone, or in small groups, and are not thinking in terms of the community, but of individual patients and do not desire, and will not promote, the use of joint equipment, or pool their interests. The community does not recognize the School of Nursing as a public enterprise, and so does not assume responsibility for it.

4. *Are there only slight variations in the amounts of time spent by each student in the respective services?*

These vary greatly in most of our schools. In one Georgia school recently visited that is connected with a hospital fully accredited by the College of Surgeons, there were no graduate supervisors to assist in allocating ward services intelligently, nor summarized case reports to show how many days had been spent in each service, and one student had been in the operating room nearly eight months!

5. *Are your classrooms, laboratories, and equipment satisfactory?*

All of our schools now report classrooms, but equipment and laboratory facilities leave much to be desired.

6. *Have you at least one full-time instructor?*

Sixteen of our Georgia schools must answer "No".

7. *Is the instructor required to carry only a reasonable proportion of the teaching load?*
All but one of our schools must answer "No".
8. *Are you giving a good proportion of the thirty-three subjects of the suggested curriculum?*
Fifteen schools would have to answer "No".
9. *Are you giving a good proportion of the hours (885) the revised curriculum calls for?*
Twelve schools would have to answer "No".
10. *Do all the students get all the instruction?*
Those that affiliate cannot always do so.
11. *Have you had the same hospital superintendent and the same superintendent of nurses for at least five years?*
Sixteen schools must answer "No" to that.
12. *Have you an adequate staff of graduate nurses?*
Nineteen must answer "No".
13. *Are all your head nurses graduates?*
Sixteen must answer "No".
14. *Do you have enough graduate floor duty nurses?*
Very few of the hospitals maintaining schools employ floor duty graduates.
15. *Are all your students high school graduates?*
All in 1931 September classes will be.
16. *Do you have an eight-hour day?*
The equivalent, yes.
17. *Do you have an eight-hour night duty?*
No. Not in any Georgia school as far as is known.
18. *Do you give more than one health examination (preferably one each year) to students?*
Most schools do not.
19. *Have you an active, interested Board and Training School Committee?**
20. *Is your school being put on a sound financial basis?*
No Georgia school of nursing known to the writer is being put on a sound financial basis.

*Only four Georgia schools known to the writer have such facilities.

The Georgia State Nurses' Association celebrates its twenty-fifth anniversary in Savannah, Ga., at the Hotel De Soto, October 26-28, 1931. Make reservations at once.

Following the convention an Institute will be conducted by Miss Mary E. Gladwin, noted lecturer and consultant in nursing. The subject on the 29th will be "Self-Improvement"; on the 30th "Ethical Relations and Problems". Every nurse will secure valuable information and great inspiration from Miss Gladwin.

Reservations should be made at once to State Headquarters for either one, or both days. The registration fee for both days is \$2.00.

The Southern Division of the American Nurses' Association will be held in Orlando, Fla., Nov. 4-5-6. Noted nurses will be in

attendance—Miss Sophie Nelson, Dr. May Ayers Burgess, Miss Janet Geister, Miss Mary Roberts, Miss Clara Noyes, and others.

Make reservations early.

COMMUNICATIONS

Medical Economics

To the Editor:

The Bureau of Medical Economics, which has been established to study all phases of general economics having a bearing on the practice of medicine, is now prepared to initiate the first of its studies. A fair summary or analysis of the several phases of medical economics must, of necessity, take into consideration conditions, practices, tendencies and opinions as they actually exist throughout the country.

In order that we may obtain the most reliable information upon which to formulate general policies and principles, we propose to ask the state and county medical societies for definite information concerning those phases of medical economics with which they have had experience.

We hope we may have your full cooperation in this work to the extent that you urge your county societies to study the schedules very carefully and return to us answers that are complete and accurate.

If you find any objection to this method of procedure, please inform us at once and we shall respect your desires.

In so far as possible we desire also to have the schedules answered by the state medical societies. The first schedule is enclosed. We assume that it may require time to formulate answers to some of the questions; however, we shall appreciate as early a reply as may be consistent with thoroughness and comprehensiveness.

R. G. LELAND, M.D., DIRECTOR,

Bureau of Medical Economics.

American Medical Association.

Chicago, August 10, 1931.

CASE REPORT AND TRAVELING DOCTOR

To the Editor:

Permit me to report the following interesting case.

Rachel Sharp, age 43, married, mulatto (Spanish-Indian Negro), came and gave history of loss of weight, polyuria, polydipsia, and polyphagia during the past year. A few months ago she developed a rash on her vulva that caused itching and did not respond to numerous remedies that her friends suggested. So by and by a "traveling doctor" who was white with a black driver, in a fine car, after following a winding trail way down the river arrived at Rachel's cabin door and stated that he had been told that she was sick. She admitted the truth and submitted to an examination from this "traveling doctor" who stated that he was 69, and that he had been a deacon in the Baptist church for fifty years. The seats of his white pants were patched with black cloth, which caused him to volunteer the information that for this reason

he did not stop at the white folks' houses to administer treatment. His examination consisted of placing a mirror behind her ear and a small "spy glass" six inches away, thus enabling him to see through her head. He changed the position of his glasses and looked through her heart, and then her knee.

He then exclaimed "Ah, my dear sister, you have cancer of the womb and unless you follow out my treatment you will die."

Rachel: "Doctor, I ain't got no money."

Traveling doctor: "Very well, then, cook me a good breakfast and catch me six chickens off the yard and I will give you medicine that will cure you."

After eating a good breakfast and putting the chickens in his car, and inquiring whether she knew of any one else that was sick and receiving the answer that a mile nearer the big road there was a woman suffering of rheumatism, he delivered his medicine and hastened away.

Needless to say she got worse instead of better, and sought relief by consulting a physician. She has a moderately severe case of diabetes and is responding satisfactorily to treatment and is taking her own insulin. She laughs heartily when the "traveling doctor" is mentioned.

Surely we have made very little progress in educating the public since Sir Thomas Browne wrote "Religio Medici." However, they no longer murder old women for witches and Rachel teaches us to meet our losses with a good natured chuckle.

J. A. REDFEARN, M.D.

Albany, Ga.

September 5, 1931.

TENTH DISTRICT MEDICAL SOCIETY

To the President:

At the business meeting of the Tenth District Medical Society it was the wishes of the members that the district organizations should not be changed to conform to the new Congressional districts. The counties comprising the Tenth District have been for many years associated and our relations have been so pleasant that not a single member wanted any change. I was instructed to write to you and ask you to include this recommendation in your Presidential Address to be delivered at Savannah before the Association next May. So far as any one knew, there was no By-Law which changed the counties in our society to conform to the new Congressional District as passed by the recent session of the General Assembly of Georgia. We did not know the feeling of the other districts, and realize that we will have to abide by the Constitution and By-Laws of the Association, but it was the sense of the discussion that our district organizations be continued as formerly. We do not want to be "First to put the old aside".

S. C. KETCHIN, M.D., *Ex-President,*
Tenth District Medical Society.

Louisville, Ga.

September 2, 1931.

MEDICAL FEES AND COLLECTIONS

To the Editor:

There are doctors in my town who are doing more than I am financially, for which I am not ashamed; nor am I jealous any more. But if any are doing more than I am to make my community a better place to live, then I have a more limited capacity or have failed in the most important phase of a physician's work.

I stepped across the street from myself yesterday and wandered away among my patients and yours and talked and listened in disguise. Many thought we made much money judging largely by our manners and methods of travel. Illness, ignorance and poverty were leaders in the crowd and stirred up strife. I talked with one young man who had expelled his hookworms, shed his pallor, come to town, married, become a father and a councilor drawing nine dollars a week. His sick baby had medicine and services of a physician. Another fifty-dollar-a-week man had six children to educate, two of whom were in college. Medical services, for the most part, are rendered among people with incomes less than fifty dollars a week. If medical fees are larger than these people can meet they will necessarily remain unpaid to the dissatisfaction of patients and physicians and this will lead away from good citizenship into social unrest, bitterness and loss of self respect. Certainly our duty first is to the public and then to ourselves.

I resolved upon my return to say something that would help all. Let's open a forum in the Journal and invite a free and frank discussion and try to arrive at some solution.

J. A. REDFEARN, M.D.

Albany, Ga.

August 31, 1931.

INFORMATION

To Our Members:

The Journal of the Medical Association of Georgia and the Cooperative Medical Advertising Bureau of Chicago maintain a service department to answer inquiries from you in reference to pharmaceuticals, surgical instruments and other manufactured products or anything you may need in your home, office, sanitarium, or hospital.

It is absolutely free and we invite you to use this service.

Perhaps you may want a certain kind of drug or instrument which is not advertised in the Journal and may not know just where to secure it most conveniently, or other things in connection with your home and practice. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in this Journal; but if they are not, we urge you to ask the Journal about them, or write direct to the Cooperative Medical Advertising Bureau, 535 North Dearborn Street, Chicago, Ill.

We want the Journal to serve you.

Books, surgical instruments and other supplies you need should be advertised in this Journal.

WOMAN'S AUXILIARY

MEDICAL ASSOCIATION OF GEORGIA

OFFICERS

President Mrs. Ralston Lattimore, Savannah
 President-Elect..... Mrs. S. T. R. Revell, Louisville
 1st Vice-President... Mrs. J. Bonar White, Atlanta
 2nd Vice-President... Mrs. C. B. Almand, Winder
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 Parliamentarian Mrs. Allen H. Bunce, Atlanta
 Editor..... Mrs. G. H. Johnson, Savannah

HISTORY OF TENTH DISTRICT AUXILIARY

The Tenth District Woman's Auxiliary archives are not very ancient; neither are they so covered with dust and silvery webs but that you can look in.

From the shelves we gathered data which gave interesting facts.

First—That the districts were created and district managers appointed at the State Woman's Auxiliary's organization meeting, held in Augusta, May 8, 1924.

Mrs. T. E. Oertel, of Augusta, was the first district manager, serving two years. Little was accomplished these first years, as all were new in the work, and the few who attended the 1924 meeting were busy gaining information of the importance of the Woman's Auxiliary and its objectives.

In 1926 Mrs. W. W. Battey, Sr., also of Augusta, was appointed district manager. For four years Mrs. Battey tried faithfully to interest the doctors' wives and widows of the district. She called a meeting in 1927 for a district meeting, but only one attended outside of the Richmond County Auxiliary. Do you wonder that she became discouraged?

However, between 1926 and 1930 four County Auxiliaries were organized.

First—Washington County Auxiliary, organized January 18, 1927, by Mrs. James B. Dillard, of Davisboro, at the home of Mrs. S. B. Malone, in Sandersville, with twenty-two members. This Auxiliary met monthly for three years, now meets quarterly.

Second—Richmond County Auxiliary, organized in 1927 by Mrs. W. W. Battey, Sr., of Augusta.

Third—Baldwin County Auxiliary, organized April or May, 1929, by Mrs. H. D. Allen, Sr., of Milledgeville.

Fourth—Jefferson County Auxiliary, organized November 1, 1929, by Mrs. S. T. R. Revell in her home in Louisville, with six members. Auxiliary meets quarterly.

The four Auxiliaries have done good work, contributed to the Student Education Fund, supplied milk to undernourished school

children and tubercular patients, gave the shut-in patients radios and Christmas trees, distributed health literature, sent telegrams and letters to their senators and representatives to support our State Board of Health.

Your speaker was appointed district manager in May, 1930, but for some reason she was not notified of her appointment until October. Surprised, yet interested, she immediately began a correspondence with the State officers for information of the duties of a district manager; then with the various Auxiliaries, that she might learn the names of the officers and members and compile a membership directory. Next, a special letter was sent to the doctors in the counties where no woman's Auxiliary existed, asking their cooperation in organizing one.

With information and instructions from the State officers and a copy of the Constitution and By-Laws, a program was planned and a district meeting called for February 25, 1931, at the Woman's Clubhouse in Augusta. The 25th was a rainy, stormy day and your speaker was very ill; nevertheless she had her doctor phone Mrs. S. T. R. Revell, of Louisville, her plans, asking her to preside, and sent the program, the Constitution and By-Laws, with suggestions. Mrs. Revell very kindly acquiesced and, although the attendance was small and the program depleted because of the inclement weather and illnesses, it was a good meeting. A Constitution was adopted and we feel it was a meeting worth while.

Since then much work has been done, record books purchased, data collected and filed, and notifications sent out.

The Tenth District has the honor of not only having the State President-Elect, Mrs. S. T. R. Revell, of Louisville, but also three other women on State committees: Mrs. W. J. Cranston, of Augusta, on the Student Educational Fund Committee; Mrs. Y. H. Yarbrough, of Milledgeville, on the Committee on Public Policy and Legislation, and your speaker is on the Health Education Committee.

Today, August 27th, finds the Tenth Dis-

strict Woman's Auxiliary gathered for its semi-annual meeting in the beautiful little city of Sandersville.

We hope this meeting will create such interest and enthusiasm as to result in a Woman's Auxiliary in every unorganized county in the district before the annual meeting in May, 1932.

MRS. JAMES B. DILLARD,
District Manager, Woman's Auxiliary.

EIGHTH DISTRICT MEETING

The Woman's Auxiliary to the Eighth District Medical Association met at the Methodist Church, Royston, August 12, 1931. Mrs. D. N. Thompson, District Manager, presided.

Invocation—Mrs. H. L. McCrary.

Welcome address given by Mrs. J. O. McCrary, responded to by Mrs. W. A. Johnson, Bowman. Reports from the following counties were given:

Clark—Mrs. H. M. Fullilove, Athens

Hart—Mrs. B. C. Teasley, Hartwell

Elbert—Mrs. A. C. Smith, Elberton

Madison—Mrs. H. G. Banister, Ila

A message from the State President, Mrs. Ralston Lattimore, was read by Mrs. D. V. Bailey of Elberton. A beautiful piano solo was rendered by Miss Mary Stewart Brown of Royston. Mrs. B. C. Teasley, Hartwell, gave a report of the State meeting held in Atlanta. Mrs. D. V. Bailey, of Elberton, gave a report of the second days meeting. Mrs. Stewart Brown, Royston, gave a splendid talk on the Student Educational Loan Fund, and asked that Hart, Elbert, Madison and Clark counties contribute to this fund.

Mrs. Paul Holiday, of Athens, gave a very interesting report from the Woman's Auxiliary to the A. M. A.

A communication from Mrs. S. T. R. Revell expressing her regrets for her inability to be present at the meeting and a message of "Why An Auxiliary" was read.

Mrs. Thompson stated that she had charge of the Scrap Book and urged that material be sent to her for the book. She expressed pleasure at meeting with the Royston Auxiliary.

The nominating committee presented the name of Mrs. B. C. Teasley, of Hartwell, for the office of District Manager. Mrs. Teasley was elected and accepted with a few pleasing remarks.

The business concluded, the meeting adjourned and the Auxiliary together with the Eighth District Medical Society enjoyed a splendid dinner as guests of Dr. and Mrs. Stewart D. Brown.

Those present were:

Franklin County

Mrs. E. T. Pool, Lavonia.

Mrs. D. B. Brown, Royston.

Mrs. J. O. McCrary, Royston.

Mrs. H. L. McCrary, Royston.

Mrs. F. G. Moss, Royston.

Stephens County

Mrs. C. L. Ayers, Toccoa.

Hart County

Mrs. B. C. Teasley, Hartwell.

Mrs. G. T. Harper, Dewey Rose.

Wilkes County

Mrs. L. R. Casteel, Metasville.

Elbert County

Mrs. F. L. Adams, Elberton

Mrs. A. C. Smith, Elberton.

Mrs. D. N. Thompson, Elberton.

Mrs. D. V. Bailey, Elberton.

Mrs. W. A. Johnson, Bowman.

Clarke County

Mrs. Guy Welchel, Athens

Mrs. H. M. Fullilove, Athens

Mrs. W. H. Cabaniss, Athens

Mrs. Paul Holiday, Athens

Mrs. H. W. Birdsong, Athens

Oglethorpe County

Mrs. L. L. Whitley, Crawford

Madison County

Mrs. H. G. Banister, Ila.

Mrs. G. L. Loden, Colbert

TENTH DISTRICT MEETING

The Tenth District Woman's Auxiliary convened at the Tabernacle in Sandersville on Thursday morning, August 27th. The opening exercises were held in joint session with the Tenth District Medical Society.

At the conclusion of these exercises the Auxiliary was called to order by Mrs. James B. Dillard, the district manager. Mrs. Dillard introduced to the assembly the following: Mrs. S. T. R. Revell, of Louisville, State President-Elect and President of the Jefferson County Auxiliary, and Mrs. E. S. Peacock, President of the Washington County Auxiliary, who were cordially greeted.

An inspiring message from the State President, Mrs. Ralston Lattimore, of Savannah, was read by the Secretary. While the unavoidable absence of Mrs. Lattimore was regretted, her message was stimulating to the zeal and enthusiasm of the Auxiliary members.

A request from Mrs. Hugo Johnson, State Editor, for news and clippings was brought to the attention of the Auxiliary.

The district manager then gave her message, which took the form of a most interesting and helpful history of the Tenth District Medical Auxiliary.

A very instructive paper on "Health Education" was given by Mrs. L. R. Bryson, of Louisville, in which the value and importance of health was presented.

Mrs. Dillard then presented to the Auxiliary one of the distinguished guests, Mrs. J. Bonar White, of Atlanta, First Vice-President; also State Chairman of the Health Committee. In an inspiring talk Mrs. White urged that the Auxiliary use the programs obtainable from the State Board of Health, that they continue Child Welfare work and stress the somewhat neglected adult health education; that they co-operate with the health authorities, and that they use the medical societies. She stated that on request she would send programs. An opportunity for discussion and questions was then given.

A lovely vocal solo by Mrs. N. H. Jordan, accompanied by Mrs. W. B. Warthen, then followed. Mrs. Jordan graciously consented to give an encore.

Mrs. S. T. R. Revell, State President-Elect, gave a most eloquent address. Her subject was "Why Have An Auxiliary?" The value and work of a Medical Auxiliary was beautifully shown in her talk, which stressed the honor, dignity, and service of the medical profession, and hence of the banding together of the doctors' wives into Auxiliaries.

The minutes were read and approved. The Constitution and By-Laws were read by the Secretary. The district manager announced the appointment of Mrs. H. P. Harrell, of Augusta, as district manager-elect and of Mrs. Y. H. Yarbrough, of Milledgeville, as parliamentarian, in accordance with Article V, Section 4, of the Constitution, which was reread at her request. Ratification of these appointments was moved by Mrs. S. T. R. Revell, was seconded and carried. Mrs. Revell asked if each county had a Constitution and By-Laws. All three county Auxiliaries represented stated that they had. Mrs. Revell gave ten suggestions for Auxiliaries, especially stressing the importance of the fiscal year running from May to May.

The Student Loan Fund was then discussed. It was stated that four men had been sent to medical college by the thirty-two Auxiliaries in the State. The district manager asked for the amounts pledged for this fund. Washington County Auxiliary pledged \$10; Richmond County pledged, but will report amount later; Jefferson County pledged \$15 or more. Baldwin County was not represented at this meeting. At Mrs. Dillard's request, Mrs. Revell gave some information about this fund, stressing the value of this very important work of the Auxiliary. She gave a summary of the amounts

loaned and the requests for this year and asked that an immediate report be sent to the State Chairman of this fund.

The Jefferson County report was given by Mrs. S. C. Ketchin, of Louisville, who made a splendid report and as a very helpful suggestion urged each Auxiliary to keep correct records and to have a historian for this purpose. Mrs. Dillard gave the fine report of the Washington County Auxiliary. Mrs. W. W. Battey, Jr., spoke of the fine work done by the Richmond County Auxiliary.

The district manager stated there would be no election of officers in the Tenth District until after the State meeting next May.

Announcement was made that luncheon would be served at 1:00 p.m., at which time the Medical Society and the Auxiliary would be guests of the Washington County Medical Society.

The members of the Auxiliary were asked to meet after this at Rawlings Sanitarium for a social period and a ride over the nearby territory.

Respectfully submitted,
MARY HARDWICK RAWLINGS, Sec'y.
(Mrs. F. B. Rawlings)

COMMUNICATIONS DISTRICTS

To the Editor:

At the recent meeting of the Tenth District in Sandersville, the Auxiliary did not hold their election for a district manager because according to the re-districting of the state most of the counties represented will go into the Sixth District. Kindly let me hear at once what the Medical Association will do regarding this change.

MRS. RALSTON LATTIMORE,
President, Woman's Auxiliary.

Savannah, Ga.
August 31, 1931.

Mrs. Ralston Lattimore,
109 East 52nd Street,
Savannah, Ga.

My Dear Mrs. Lattimore:

Your favor of the 31st has been received. There will not be any change in the plan of organization of our Councilor districts before the next annual session of the Association to be held in Savannah.

Very sincerely,
ALLEN H. BUNCE, M.D.,

Secretary-Treasurer of the Medical Ass'n. of Ga.
Atlanta, Ga.
September 2, 1931.

The News Service of the New York State Department of Health in its September 24th Bulletin states that: "Of all communicable diseases which are reported in New York State about one-half occur among children. The recent White House Conference on Child Health and Protection revealed the fact that nearly 3,000,000 cases of communicable diseases are reported in this country annually. These diseases result in about 15 per cent of the total deaths."

BOOK REVIEWS AND ABSTRACTS

BOOK REVIEWS

Modern Proctology. By Marion C. Pruitt, M.D., L.R.C.P., S. (Ed.), F.R.C.S. (Ed), F.A.C.S., Atlanta, Ga., Associate in Surgery, Emory University School of Medicine; Assistant Visiting Surgeon, Grady Hospital; Proctologist, Crawford W. Long Memorial Hospital and Clinic, Georgia Baptist Hospital, and Anti-Tuberculosis Association, etc.; with 233 illustrations. St. Louis: The C. V. Mosby Company, 1931. Price \$8.00.

This book, recently from the press, should be useful to all students of proctology. It embodies all the worth-while facts which are told in a simple, practical, and forceful manner by one who has had a large experience in this field.

The book contains twenty-eight chapters, some of which deserve special mention. The one on fistulae tells in a most clear and succinct manner the methods to be adopted. The classification of hemorrhoids as an indication for the most suitable method of treatment is very good. The injection treatment is fully described. The troublesome symptom—pruritus—is dealt with in an excellent manner. Complete prolapse of the Rectum is treated as hernia, and as proof skiagrams show the barium-filled small intestine outside the pelvis and below the tuberosity of the ischium.

Most of the 233 illustrations are original. They are well made and are very helpful in elucidating the text.

This book will be a useful addition to any doctor's library.

W. E. PERSON, M.D.

Modern Surgery, by J. Chalmers DaCosta, M.D., L.L.D., F.A.C.S.; Samuel D. Gross, Professor of Surgery, Jefferson Medical College. Surgeon to Jefferson Medical College Hospital, Consulting Surgeon to the Philadelphia General Hospital, St. Joseph's Hospital, and Misericordia Hospital, Philadelphia. Assisted by Benjamin Lipshutz, M.D., F.A.C.S., Surgeon to the Mt. Sinai Hospital; Associate in Neuro-anatomy, Jefferson Medical College. Tenth Edition. Revised and Reset. 1,404 pages with 1,050 illustrations, some in colors. Philadelphia and London: W. B. Saunders Company, 1931. Cloth, \$10.

In the preface of this edition Doctor DaCosta set as his ideal "seizing with accuracy the new that is true and holding tenaciously to the old which seems to be correct." He has apparently charted his course on this difficult sea with consummate skill. This, the tenth edition of this book has been completely revised and reset.

It offers to the general practitioner of medicine and particularly to the medical student a general review of the field of modern surgery selected with metic-

ulous care. In passing it might be well to mention briefly a few topics included in this book—the injection treatment of varicose veins, the injection treatment of hemorrhoids, the surgical treatment of tuberculosis with the great hope it is holding out to countless tuberculous subjects, the place of surgery in the treatment of chronic arthritis, spinal anesthesia and the treatment of fractures. In looking over this book one can but wonder how such a tremendous volume of material could be presented in the confines of one volume.

MARK S. DOUGHERTY, JR., M.D.

Heart Disease, by Paul White, M.D. Pp. 931. Price \$12. New York, The MacMillan Co., 1931.

This book is a dandy. To every doctor who is interested in heart disease—and every physician should be—it will be of great value. Study of this book by the general practitioner should just about do away with the necessity for heart specialists!

"The need for a clear, concise, and comprehensive presentation of the diagnosis and treatment of heart in the light of our present knowledge has caused me to write this book," says Dr. White, and he has splendidly filled this need. "This is not a book concerned primarily with the details of anatomy, physiology, pathology, pharmacology, or instrumental technique, fundamental though such knowledge may be." This sentence forestalls criticism of inadequacies in these respects. "However, the reader chiefly interested in these subjects or desiring special information about them is referred to authoritative works dealing more completely with them than is possible in a book of the present size and scope . . . Also, for the sake of simplicity and clearness, detailed references, controversies, and theoretical discussions have been largely omitted from the text, but an effort has been made to distinguish between facts and theories. . .

"There are four parts: the first deals with the examination of the patient, the analysis of his symptoms and signs; the second discusses the aetiological types and causes of heart disease; the third deals with the structural changes present in the heart and great vessels; and the fourth takes up disorders of function."

One thing that struck the reviewer is the insistence on the importance of the history. Doctor White actually says that, if it were necessary to delegate to an assistant either the history or the physical examination, he would prefer to take the history himself and turn over the physical examination to the assistant! His emphasis on the old-fashioned history is singularly like that of Doctor Alvarez. It has been said that the modern physician often has his office nurse take the history. White and Alvarez, however, thoroughly

grounded as they are in the latest kink of science, might term that type of practice "veterinary medicine."

The latest roentgenologic methods are well presented. The value of other aids to diagnosis is outlined, but not over-emphasized. The proper use of the older drugs with the author's opinion of the newest ones is given. In short, the clinical aspects of heart disease are brought up to 1931. This is essentially a book for the clinician. The level headed sanity of this book is impressive. Even more impressive, however, is the stimulating effect: the surface of cardiology has hardly been scratched.

The book is adorned with excerpts from the famous works of such men as Cheyne, Stokes, Adams, Corrigan, Auenbrugger, Austin, Flint, Graham Steele, Harvey, Osler, Einthoven, Heberden and Mackenzie. The words of these original papers are majestic: they must stimulate our interest in the giants of other days. It is interesting to note that visual disturbances following over-dosage of digitalis, which have recently attracted considerable attention in the literature, was described by Withering in 1785. Finally there is a 188-page bibliography for the student who wishes to delve more deeply.

Lest it seem that the reviewer has waxed panegyric and that enthusiasm has blinded him:

"Aetiological" for etiologic, "colour for color and other old fashioned spellings, and the newly-coined word "diagnosable" (at least it does not appear in Webster) all served to irritate. If consistency is a jewel, an author should not be an antiquarian and an innovator in the same book. Moreover, some minutiae in the section on cardiac anomalies this reviewer can not accept. Yet he recalls a classic sentence from the I.D.R., which he memorized in 1917, "Quibbling over the minutiae is indicative of failure to grasp the spirit."

Typographically, the perfection of the book is what one expects from the MacMillan Company, and it is bound securely enough to stand much poring over. The monograph idea so splendidly being carried out by MacMillan provides the impecunious physician (and most of us seem to be impecunious these days) with a means of acquiring new, good books that really interest him without cluttering up his shelves with expensive sets of imposing-looking tomes that might never be opened.

The Boston editor of this series had laid himself open to the charge of myopia in looking around for contributors, although it was only natural for him to begin in his home town. The publishers say, however, that other monographs are in preparation in all parts of the world, one by "an outstanding man in Georgia." May this book from our own State rival Doctor White's in value to the practitioner. The reviewer believes that it will.

L. M. B.

Piersol's Anatomy Including Structure and Development and Practical Considerations. Ninth Edition

Revised under the supervision of G. Carl Huber, M.D., Sc.D., Professor of Anatomy; Director of the Anatomic Laboratories and Dean of the Graduate School, University of Michigan, with seventeen hundred and thirty-four illustrations of which fifteen hundred and twenty-two are original and four hundred and sixty are in color. 2,104 pages. J. B. Lippincott, Philadelphia.

As stated by the author in the preface "the larger part of the editorial revision consisted of an introduction into the text of a consistent and uniform B. N. A. nomenclature." The revision of the subject matter deals largely with the histogenesis of the blood elements, the development of the lymphatic and primary veins, and the section dealing with the nervous system. An important part of this text on anatomy is the paragraphs on practical consideration revised by Eldridge Eliason which has as its aim the correlation of the descriptive matter with the practical side of medicine.

The illustrations in this book are clear cut and well labelled and add a great deal to its value.

MARK S. DOUGHERTY, JR., M.D.

Abdomino-Pelvic Diagnosis in Women, by Arthur John Walschied, M.D., Director of Obstetrical and Gynecological Department of Broad Street Hospital; Director of Obstetrical and Gynecological Department of Pan-American Medical Center and Clinics, New York City. One color plate and 397 illustrations. Cloth. 957 pages.

The C. V. Mosby Co., St. Louis, 1931. Price \$12.50.

You will find it a pleasure as well as highly informative to read this up-to-date book. Doctor Walscheid determined to create a clinical monograph upon gynecologic diagnosis and he succeeded.

The book is divided into a general and a special section. The former deals with general symptomatology, etiologic factors and pathologic processes with an introduction containing anthropologic data taken from Professor Jayle's book, *Morphology of the Human Female*, which is very interesting. The special section takes up the diagnosis of diseases of the external genitals, the vagina, the cervix, the uterus, the tubes, the ovaries, the pelvis, the urinary tract, the abdominal wall, the viscera, the anus and the rectum.

Numerous illustrations are a valuable adjunct to any book and to a textbook they breathe life into the many pages. Almost four hundred beautiful illustrations have been used in this book.

The text is interesting and very well written. It is not overburdened with statistics but an adequate list of references is given.

A large number of illustrative case histories are recorded which I think lend strength to the diagnostic contentions.

The historical background has been sketched in

each condition which tends to make the reader more attentive.

The author's broad experience, humor and ready common sense are reflected in its pages.

The book is well bound and its paper is fine.

EVERT A. BANCKER, JR., M.D.

Infant Nutrition. A Textbook of Infant Feeding for students and Practitioners of Medicine. By Williams McKim Marriott, B.S., M.D., Professor of Pediatrics, Washington School of Medicine; Physician in Chief, St. Louis Children's Hospital, St. Louis, Mo. Cloth \$5.50, Pages 375, with 53 illustrations. St. Louis: The C. V. Mosby Company, 1930.

The lion opens his mouth to roar and a mouse squeaks. This has been the reaction of some men after a hurried glance through this recent product of the mind of the dean of American pediatricists. Reading, however, convinces us that the book in its clearness, simplicity, conservatism, breadth of thought, and completeness is an adequate and worthy expression of the man who wrote it.

Throughout the 359 pages the author has confined himself to the nutrition of infants. Older children have not been considered. Not a word has been wasted. The writer speaks with authority. He deals with subjects at times in a sweeping manner, but when he does so, he deals with facts based on careful and extensive laboratory and clinical experience. Those facts are given as facts and not in the form of tables, statistics, and references to numerous researches. The sentences are full of meat which has been well prepared and is easy to assimilate.

One of the characteristic features of the book is that no pains have been spared to make reading easy and free from distraction. The arrangement is excellent. The paper and type do not cause eye-strain. Only one typographical error was found in the whole book. The illustrations are excellent. The subject matter will be interesting and of value to students, general practitioners, and pediatricists.

THOS. BOLLING GAY, M.D.

BOOKS RECEIVED

Tables of Food Values. By Alice V. Bradley, B.S., Supervisor and instructor of Nutrition and Health Education, State Teachers College, Santa Barbara, California. Contains 128 pages. Publishers: The Manual Arts Press, Peoria, Illinois. Price \$2.00.

The Practice of Medicine. By A. A. Stevens, A.M., M.D., Professor of Applied Therapeutics in the University of Pennsylvania; Visiting Physician to Philadelphia General and University Hospitals; Consulting Physician to St. Agnes' Hospital, Philadelphia. Third Edition, Entirely Reset. 1150 pages, illustrated. W. B. Saunders Company, West Washington Square, Philadelphia. Price \$8.00.

Gonorrhea in the Male and Female. By Percy S. Pelouze, M.D., Associate in Urology and Assistant Genito-Urinary Surgeon at the University of Pennsylvania; Fellow of the Philadelphia College of Physi-

cians. Philadelphia, Pa. Second Edition, revised. 440 pages with 92 illustrations. W. B. Saunders Company, West Washington Square, Philadelphia, Pa. Price \$5.50.

Simple Lessons in Human Anatomy. By B. C. H. Harvey, M.D., Professor of Anatomy of the University of Chicago. Contains 434 pages. Publishers: American Medical Association, 535 North Dearborn Street, Chicago.

Approved Laboratory Technic—Clinical Pathology, Bacteriological, Serological, Biochemical, Histological. Prepared under the auspices of the American Society of Clinical Pathologists. By John A. Kolmer, M.D., Professor of Pathology and Bacteriology, Graduate School of Medicine, University of Pennsylvania; Professor of Immunology and Chemotherapy, School of Medicine, Temple University; Head of the Department of Pathology and Bacteriology, Research Institute of Cutaneous Medicine. And Fred Boerner, V. M. D., Associate Professor of Bacteriology, Graduate School of Medicine, University of Pennsylvania. Assisted by C. Zent Garber, M.D., et al. Contains 663 pages with eleven colored plates and three hundred illustrations in the text. Publishers: D. Appleton & Company, 35 West 32nd Street, New York City. Price \$7.50.

SOUTHERN TUBERCULOSIS CONFERENCE AND SOUTHERN SANATORIUM ASSOCIATION MEETING

Time and Place

October 6-9, 1931—Biltmore Hotel, Atlanta, Ga.
Hotel

The Biltmore Hotel has been chosen as Conference headquarters—all sessions will be at the hotel—special Conference rate of \$3.00 per day has been granted by the hotel management.

Who May Attend

Anyone interested in Tuberculosis Control and the promotion of Health.

Who May Join

You and any friends who may be interested.

What Are Membership Dues

One dollar for individual memberships, five dollars for organization and institutional memberships, and five dollars and up for contributing memberships.

For What Is the Membership Fee Used

To pay the necessary Conference expense such as printing, postage, etc.; to pay expense of any invited speaker from without the Conference area;—No one connected with the Conference receives any compensation. Membership dues may be sent to Georgia Tuberculosis Association, 282 Forrest Avenue, N.E., Atlanta, Ga.

Purpose

To bring together those interested, both professional and lay groups, to discuss methods of procedure in the various fields of tuberculosis control, to exchange experience and to secure the latest information concerning tuberculosis control measures, so that this may be carried back to states and counties represented for local application to local programs.

Program

Some topics for discussion will be:

Tuberculosis control programs, field clinics, etc.

Technical papers for physicians—x-ray interpretation.

Clinical practice.

Case finding.

Training teachers for teaching health in high schools and colleges.

Health education.

County organization.

Seal sale.

Publicity.

Guests

The Executive Committee of the National Tuberculosis Association will meet at the same time and place. A number of outstanding men from all parts of the nation will be present, as will be members of the national staff. Many of these people will speak at some of the conference sessions.

Why Atlanta

The Southern Tuberculosis Conference was organized in Atlanta in 1914. Since then a session has been held in nearly every state in the Southern Conference District. The conference is coming back to Atlanta for the first time since its organization and Atlanta plans to give it a great welcome. Somewhere someone on the program will attempt to show the progress in tuberculosis control, particularly in the South, since 1914. Everyone receiving this announcement is cordially invited.

"WHEN, AS, AND IF"

the bottle-fed baby exhibits symptoms indicating partial vitamin B deficiency—described by Hoobler as (1) anorexia, (2) loss of weight, (3) spasticity of arms and legs, (4) restlessness, fretfulness, (5) pallor, low hemoglobin, etc.

Dextri-Maltose with Vitamin B may be used in adequate amounts (up to 71 Chick-Roscoe units) without causing digestive disturbance. This ethically advertised product derives its vitamin B complex from an extract of wheat germ rich in B and brewers yeast rich in G. Physicians who have attempted to make vitamin B additions to the infant's formula but who have been obliged to abandon same due to diarrheas or other unfortunate nutritional upsets, will welcome Mead's Dextri-Maltose with Vitamin B. This is a tested product with rich laboratory and clinical background and is made by Mead Johnson & Company, a house specializing in infant diet materials.

Not all infants require vitamin B supplements, but when the infant needs additional vitamin B, this product supplies it together with carbohydrate. In other cases, the carbohydrate of choice is Dextri-Maltose No. 1, 2, or 3.

The Randolph County Medical Society heads the honor roll for 1932. Dr. G. Y. Moore, Cuthbert, Secretary-Treasurer, reported the payment of dues by all members on September 5th.

NEWS ITEMS

Dr. Carl B. Welch, A. S., U. S. P. H. S., Bainbridge, announces that trachoma clinics and work will be continued over the State for another year from September 1st. One field nurse will be used to make detailed examinations in each county of the State when a sufficient number of cases are found in any locality. Where such conditions are found clinics will be held to diagnose and treat all the patients. Doctor Welch solicits information from any physician who may come in contact with a patient suffering with trachoma or what he believes to be trachoma.

Dr. A. F. Saunders, Valdosta, was re-elected president of the Phi Chi Medical Fraternity at a meeting held at San Francisco on September 3rd.

Dr. M. S. Archer, formerly of Chipley, has moved to Buford and opened offices for the practice of medicine.

Dr. J. D. Applewhite, Macon, in co-operation with Dr. George D. Williams, of the Washington University School of Medicine, St. Louis, have been engaged in making a tuberculosis survey of Macon and Bibb county. Macon was selected for the work because of the excellent work by the Bibb County Board of Health.

The Secretary-Treasurer has an inquiry for a young man qualified to direct the laboratory of a hospital of one hundred twenty bed capacity, who has had several years' experience in pathology and capable of doing tissue work. Also familiar with clinical laboratory work and serology. He would be expected to do post mortems and conduct clinical pathological conferences for the staff.

The Ninth District Medical Society held its semi-annual meeting at Tate on September 16th. The Cherokee County Medical Society and the Woman's Auxiliary were hosts. The following titles for papers were on the program: "Medical Organization," Dr. R. M. Moore, Waleska; "Treatment of Typhoid," Dr. J. P. Turk, Nelson; "Vitamin Therapy," Dr. D. H. Garrison, Tate; "Case Report," Dr. Grady N. Coker, Canton. Luncheon was served at noon.

The Southern Tuberculosis Conference was held in Atlanta, October 6th to 9th, inclusive. Representatives of thirteen Southern states attended the meetings.

The Pedigree Dairies, Inc., Atlanta, are publishing a monthly bulletin—"Civic Health." The September issue contained articles on the following subjects: "What a Good School Program Should Include," "University of Kentucky Urges Use of More Milk," "Nature Linked by Science Provides the Humanitarian Service-Pasteurized Milk," "A Regimen With Milk Ordered for Students of Cornell and Wheaton," and "Experience for Students in Business and Dietetics."

Dr. N. M. Owensby, Atlanta, read a paper before the Fulton County Medical Society, Atlanta, on

September 3rd, entitled "Peace Time 'Shell Shock' " in which he described it as a growing menace to millions of Americans. He said that "Our forefathers were not disturbed with this condition, which is another name for nervousness or hysteria."

Dr. Frank Bird, Valdosta, entertained the members of the Lowndes County Medical Society at Ocean Pond on September 9th. Visitors entertained included Dr. Lewis Smith, Lakeland; Dr. E. P. Quillian, Clyattville; Dr. E. J. Smith, Hahira; and Dr. Cleveland Thompson, Millen.

The Fifth District Medical Society will hold its next meeting in the Auditorium of the Wesley Memorial Hospital at Emory University at 10:00 a. m., October 21st. The following titles for papers are on the scientific program: "Prevention and Treatment of Acute Gonorrheal Urethritis," Dr. E. G. Ballenger, Atlanta; "The Terminal Bowel as a Foci of Infection," Dr. Marion C. Pruitt, Atlanta; "Measles Prophylaxis with Parent's Serum," Dr. William Willis Anderson, Atlanta; "Treatment of Fractures," Dr. Fred G. Hodgson, Atlanta; "The Heart," Dr. Stewart R. Roberts, Atlanta; "Diagnosis of Brain and Spinal Cord Lesions," Dr. J. Calvin Weaver, Atlanta; "The Estimation of Post-Traumatic Industrial Disability," Dr. C. W. Roberts, Atlanta; "Medicine," Dr. Russell H. Oppenheimer, Emory University; "Gynecology," Dr. Walter R. Holmes, Atlanta; "Skin Diseases," Dr. Howard Hailey, Atlanta. Dr. Russell Littlejohn of Sumter, South Carolina, will deliver an address; subject will be announced later.

Dr. Lovick W. Pierce, formerly of Macon, announces the removal of his office to 306 Gordon Building, Brunswick. Practice limited to urology.

The American Medical Association, 535 North Dearborn Street, Chicago, has printed a pamphlet, entitled "Extension Courses for Rural Physicians," by Dr. Joe P. Bowdoin, Deputy Commissioner of Health of Georgia. The article is a reprint from the Proceedings of the Congress on Medical Education, Medical Licensure and Hospitals, Chicago, February 16, 17, 18, 1931.

Dr. E. M. Nelson and Mr. H. H. Mottern of the Bureau of Chemistry and Soils of the United States Department of Agriculture reported to the members of the American Public Health Association, at its session in Montreal, that oranges produced by trees sprayed with lead arsenate not only differ in chemical composition from normal oranges, but suffer a considerable loss of vitamin C content which is regarded as such a highly desirable constituent of oranges.

Dr. Hulett H. Askew and Dr. Harold J. Starr announce their association in the practice of medicine and surgery. Suite 910 Candler Building, Atlanta.

R. B. Davis Company, Hoboken, New Jersey, has prepared a chart on the use of Cocomalt, entitled "Children in Drought Area Gain 4 to 16 Pounds in

8-Week Clinical Test by Drinking Cocomalt, the Chocolate Flavored Food Drink." The statement in part follows: "Some time ago we co-operated with health authorities in Arkansas in an unusual test. Cocomalt clinics were established in the drought area and the children placed under the care of an attending physician and registered nurse. The children were given Cocomalt mixed with milk once a day. The average gain for forty days was 8½ pounds per child. One of the most outstanding features of this work was that in thirty children who were checked an increase in hemoglobin from 5 to 15 per cent was indicated." A chart will be mailed to any physician on request.

Dr. Guy C. Hewell, formerly of Dewy Rose, is now associated with Dr. Wm. F. Shallenberger in the practice of obstetrics and gynecology at 33 Ponce de Leon Avenue, N.E., Atlanta.

The Atlanta Neurological Society met at the Academy of Medicine, Atlanta, on September 25th. Dr. W. W. Young, Atlanta, gave "Report of Cases."

Dr. Allen H. Bunce, Atlanta, Secretary-Treasurer of the Association, has resumed his duties after being injured on September 16th when his automobile struck a parked car in an effort to avoid a collision with an oncoming truck.

The Randolph County Medical Society held its regular meeting at Cuthbert on October 3rd. Dr. A. L. Crittenden, Shellman, gave a "Case Report"; Dr. D. L. Smith, Cuthbert, read a paper entitled "Treatment of Pulpless Teeth."

The staff of the Georgia Baptist Hospital, Atlanta, held their regular monthly meeting on September 22nd. Dr. Dan Y. Sage, Atlanta, presented a case of "An Obscure Upper Abdominal Tumor"; Dr. E. S. Byrd, Atlanta, a case exhibiting "Interesting Manifestations in a Young Girl." The staff joined in a general discussion of a "Review of Recent Mortalities."

The United States Public Health Service in its Health News of September 26th, says that "One of the important advances within recent years in preventing the introduction of disease from abroad has been the development of the rat-proofing of ships. It is well known that bubonic plague is spread by means of rats. Rats are great travelers. It is through such infected rats that plague existing in one port may be carried by a ship to uninfected ports."

Dr. and Mrs. Marion T. Benson, Atlanta, were given a surprise al fresco party by a group of intimate friends on their twenty-fifth wedding anniversary, September 19th. A silver gazing globe and pedestal were presented to them to be placed in their attractive and picturesque garden, which is one of the many beautiful gardens in Druid Hills. Mrs. Benson is Past-President of the Woman's Auxiliary to the Fulton County Medical Society and the Medical Association

of Georgia. During her term as President of the Woman's Auxiliary to the Medical Association of Georgia, she worked earnestly to raise the "Student Educational Fund" to assist deserving medical students in obtaining a medical education. Doctor Benson is Past-President of the Fulton County Medical Society and for many years has been actively associated with other medical organizations.

Shreveport's 1931 Fall Clinic will be held at the Charity Hospital, Shreveport, La., on October 21-22-23. Clinics will be given on General Surgery; Eye, Ear, Nose, and Throat Diseases; Obstetrics; Genito-Urinary Diseases; Internal Medicine, Allied Branches and X-Ray. Clinics will be given daily in each of the subjects mentioned. Luncheon will be in the hospital dining-room. No registration fee will be charged. The morning sessions will be devoted to Surgical Clinics and demonstrations in General Surgery; Obstetrics; Eye, Ear, Nose, and Throat Surgery; and Genito-Urinary Surgery. The afternoon sessions will be given to Internal Medicine, X-Ray and Applied Branches. The evening sessions will be taken up with discussions of Clinic, Economic Problems, and Moving Picture Demonstrations. There will be no expense, except for two nights in the hotel. You are invited to send your problem patients ahead to any of the following hospitals: Highland, Tri-State, Schumpert, and North Louisiana. The patients should reach Shreveport on or before October 19th. The hospitals have offered their facilities free.

OBITUARY

Dr. Charles Hyatt Richardson, Sr., Montezuma; member; College of Physicians and Surgeons of Baltimore, Md., 1882; aged 72; died of a malignant growth of the parotid gland at his home on August 17, 1931. He was born in Fort Valley and reared in Byron. Doctor Richardson graduated from Mercer University, Macon, in the class of 1879. After graduating in medicine, he practiced at Byron for one year, then removed to Montezuma where he did a general practice for forty five years until he retired five years ago. Doctor Richardson was a leader in the medical profession, business, civic and religious activities of his community. He was a member of the Macon County Medical Society and the First Methodist church. Surviving him are one daughter, Mrs. George Chastain, Montezuma; two sons, A. C. Richardson, Montezuma, and Dr. Chas. H. Richardson, Jr., Macon. Funeral services were conducted from the First Methodist church by Rev. A. J. Thomas. Interment was in the Felton cemetery at Montezuma.

Dr. William R. Googe, Abbeville; member; Emory University School of Medicine, Emory University, 1890; aged 64; died at his home on August 20, 1931. He was born and reared in South Carolina. Doctor Googe began the practice of medicine in Broxton, Coffee county, and within a short time moved to Abbeville where he had practiced for forty years. He had been mayor of Abbeville and at the time of his death was serving as a member of the Board of Education, City Council, and a steward in the Methodist Church. He was a member of the Wilcox County Medical Society and Masons. Surviving him are five sons, Crisp Googe, Conyers; W. R. Googe, Jr., Jacksonville, Fla.; Jesse, Alton, and Pittman Googe, all of Abbeville; two daughters, Mrs. L. A. Ware, Abbeville; Mrs. J. H. Maddox, Rochelle. Funeral services were conducted from the Methodist church by Rev. W. C. Bryant and interment in Stubbs' cemetery at Abbeville.

Dr. Arthur Chase Davidson, Sharon; member; University of Georgia Medical Department, Augusta, 1877; aged 83; died at his home on August 20, 1931. He was one of the venerable citizens of Taliaferro county and had been actively engaged in the practice of medicine for more than fifty years. Doctor Davidson continued his practice until a few months ago. He was a man whose life had been broadened by study and contact with his fellowman. The people of Taliaferro county knew him as one of its most generous citizens. Surviving him are two sons, Dr. A. A. Davidson, Augusta, and Walter Davidson, Greensboro; one daughter, Mrs. L. R. Brown, Sharon. Funeral services were conducted from the Methodist church and interment in the Sharon cemetery.

DOCTOR WANTED

We are very anxious to secure a good, clean, capable doctor to locate here, who can at least perform such operations as appendectomy and tonsillectomy and such others as usually are performed in a small town.

Our town is a county seat with a population of 2,000, located on railroad, "Bankhead Highway" and "Broadway of America". We have the third or fourth largest number of producing oil wells of any county in Texas.

There is only one active doctor here who does any surgery at all. He is about 60 years of age, does not keep up with the progress of the profession, belong to any medical society or take a medical journal. Yet his practice amounts to about \$2,500 per month.

If we can get a young or middle aged man, I think we can control the practice here in a year's time. Within a year's time I think he can get the appointment as railay surgeon; also appointment as county physician. This usually pays from \$1,500 to \$2,000 annually.

Address: Texas, Care Journal of the Medical Association of Georgia.

Editor's Note: The above letter was received at this office from a drug company in Texas. Any letter received with the above address will be forwarded to the company.

UNITED STATES CIVIL SERVICE EXAMINATION

The United States Civil Service Commission announces the following-named open competitive examination:

SOCIAL SERVICE WORKER (PRISONS BUREAU)

Applications for the position of social service worker (Prisons Bureau) must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than October 22, 1931.

The examination is to fill a vacancy in the position of junior warden's assistant, Federal Industrial Institution for Women, Alderson, W. Va., and vacancies requiring similar qualifications, throughout the United States.

The entrance salary is \$2,000 a year less \$300 a year for maintenance.

Competitors will be rated on answers to practical questions in the field of social work.

Applicants must have been graduated from a standard high school or have completed 14 units of high-school work acceptable for college entrance, and in addition must have had at least two years of full-time training in a college, university, or school of social service of recognized standing. Applicants must also have had at least two years' experience in social service work, or similar experience of equal value in correctional institutions for adults.

Full information may be obtained from the Secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city or from the United States Civil Service Commission, Washington, D. C.

WHITE HOUSE CONFERENCE MEMBER RATES BREAST MILK BEST FOR INFANTS

"The nearer the milk administered to the artificially fed infant approaches human breast milk in composition and sterility, the nearer the artificially fed infant approaches in its general resistance and condition that of normal nurslings."

This statement written by a member of the White House Conference presents accurately the idea back of S. M. A., an infant food developed at the Babies and Children's Hospital of Cleveland, Ohio. S. M. A. is regarded by many physicians to be the closest approximation to mothers' milk in existence.

It resembles breast milk, having the same percentage composition and in addition, the same buffer value, depression of freezing point, specific gravity, hydrogen ion concentration and caloric value. It is also interesting to note that the fat in S. M. A. has the same character numbers as breast milk fat, such as Polenske, Iodine, Reichert Meissel, Saponification, Melting Point and Refractive Index. Sufficient cod liver oil is incorporated in this fat to make it anti-rachitic.

Like breast milk, S. M. A. is used without modification for the normal, full term infant with excellent results in most cases.

The tuberculin tested cow's milk used as a basis

for the production of S. M. A. is under the strict supervision of both Cleveland and Chicago Boards of Health.

Special Food for Premature Infants

For premature infants, and to correct diarrhea and malnutrition, Protein S. M. A. (Acidulated) is recommended. This is a special form of S. M. A. high in protein and low in fat and carbohydrate, with a relatively high acidity. The same anti-rachitic fat is present supplying vitamin "D", and it contains enough lemon juice to make it anti-scorbutic as well.

Develops Non-Allergic Milk

For infants, children and adults sensitive to milk protein, the S. M. A. Corporation has produced a non-allergic cow's milk, (SMACO 300). Excellent results have been reported.

VITAMINS A AND D AT THEIR BEST

For vitamin A therapy, Mead's Standardized Cod Liver Oil continues to be 4 to 11 times as economical as cod liver concentrates. For vitamin D therapy, the new reduced price of Mead's Viosterol when prescribed in the original 50 c.c. bottle, makes it less expensive to the patient than Mead's Standardized Cod Liver Oil or any cod liver oil concentrate. Samples on request of Mead Johnson & Co., Evansville, Ind., U. S. A.

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DRUG ADDICTS

Drug and Alcoholic patients are humanely and successfully treated in Glenwood Par Sanitarium, Greensboro, N. C.; reprints of articles mailed upon request. Address W. C. Ashworth, M.D., Owner, Greensboro, N. C.

VITAMIN EGGS:—

Strictly fresh infertile eggs produced by hens fed clean wholesome grain and mashes, with pure well water for their drink. Mashes contain Silmosterol—(2-X irradiated ergosterol). Eggs analyse 12% fat, as compared with Government analyses of 9% for average egg.

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THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

DEVOTED TO THE WELFARE OF THE MEDICAL PROFESSION OF GEORGIA
PUBLISHED MONTHLY under direction of the Council

Volume XX

November, 1931

Number 11

MEMORIAL TO DOCTOR PAUL FITZSIMMONS EVE

In the historic city of Augusta on November fourteenth next there will be dedicated and unveiled a monument to the memory of Dr. Paul Fitzsimmons Eve. This will be a notable and unique event; notable on account of the high purpose engendering it and the many distinguished persons assembled, and unique because of the all too rare occasions on which we are wont to honor other than military genius. To pursue to its ultimate termination the inquiry as to why this is true would lead us too far afield nor, we fear, would the answer redound to the credit of our boasted civilization. The fact remains that the large majority of monuments are erected to perpetuate the memory of some feat of arms or the successful leader of forces engaged in the delectable occupation of blowing one another to bits with high explosives or spitting each other upon pointed lengths of tempered steel. It is, therefore, all the more fitting that the public mind should once in a while be turned towards the contemplation of heroic deeds done unselfishly in the interest of humanity. The life of Doctor Eve exemplifies such service of the highest type.

He was born near the city of Augusta in 1806 and after graduation from Franklin College in 1826 gained his medical degree from the University of Pennsylvania. He then turned his attention to medical research and post-graduate study in London and Paris. It was during his stay in the latter city that Charles X was dethroned and revolution shook France to its foundations. Doctor Eve at once entered the service of the revolutionists as an ambulance surgeon. The following year he transferred his activities to Poland which had arisen against the tyrannical oppression of Russia. Here he served with

marked distinction as field surgeon of the Fifteenth Infantry Regiment, the rank of Major and Chief of Ambulance in General Turna's Division. After the fall of Warsaw he suffered an attack of cholera which saved him from imprisonment at the hands of the Russians and on his release from the detention camp where he was interned he returned to Paris and in January, 1832, sailed for the United States.

In recounting his achievements in his native country the talented John T. Boifeuillet of the *Atlanta Journal* has written as follows:

"Then commenced that wonderful career in surgery in Georgia and Tennessee, which rapidly advanced him to a commanding position of leadership in the American profession.

"His name shone luminously in peace and in war. Doctor Eve participated professionally not only in the French Revolution and the Polish-Russian war, but he was the first volunteer surgeon appointed to serve in the conflict of 1846 between the United States and Mexico. The year 1859 found Doctor Eve in Italy, on the scene of war between the Austrians, commanded by Francis Joseph, and the French and Sardinians, under command of Napoleon III and King Victor Emanuel of Italy.

"The services of Doctor Eve were particularly valuable in the famous battles of Magenta and Solferino. The Austrians were defeated in these combats. The victory of Solferino led to the independence of Italy.

"When the flame of battle between the north and south flashed forth, Doctor Eve was appointed surgeon of Tennessee, served on the medical examining board of the Confederate Army, and did an immense amount of hospital work. Later he participated professionally at the bloody battles of Shiloh, where the heroic Albert Sidney Johnson fell. Subsequently Doctor Eve was appointed chief

surgeon in the army of General Joseph E. Johnston and was at the scene of battles around Atlanta. He was in service at Augusta when the war closed.

"The 'Medical History of the War' contains no reading more interesting and thrilling than Doctor Eve's reports of certain 20 amputations and 13 resections at the hip joints, performed by Confederate surgeons.

"The name of Dr. Paul Fitzsimmons Eve is intimately blended with a notable epoch in the history of Poland. The Polish commemoration in Augusta of the character and works of Doctor Eve will be performed 100 years from the date of his memorable services in Poland, and near the spot where his hallowed dust reposes, thousands of miles from the scene where he labored with the Poles in their heroic struggle to unfasten the yoke which bound them to servitude. His name will always be a watchword of liberty in that land.

"It is well that posterity should hold in remembrance the career of Paul Fitzsimmons Eve which time can never tarnish or obliterate on the pages of history.

"While in the seventy-second year of his age this remarkable Georgian died suddenly in Nashville, Tenn., on November 3, 1877, while on his way to visit a sick patient.

"In the 'Garden of Graves' in Augusta, near the spot where he was born, he sleeps under garlands of fame. In the very brief and modest epitaph on the handsome marble monument that stands at his last resting place, it is stated that his professional motto was 'The Lord healeth all our diseases'.

"The light of his noble character and lofty genius has come down the track of a century, shining upon a long line of kinship which has contributed much to the honor of Georgia and the distinction of society".

To commemorate the services of Doctor Eve rendered to Poland in its struggle for its independence the Polish-American Medical and Dental Association together with the Medical Department of the University of Georgia will present a memorial to perpetuate the memory of his good deeds. The monument will be unveiled by Tytus Filipowicz, Polish Ambassador to the United States.

President Hoover has signified his intention of being present if affairs of state do not prevent, in which event he will be represented by one of the members of his official family. It is expected that Tennessee will send a large delegation, headed by its Governor and United States Senators, and Georgia is to be represented by a distinguished body lead by Governor Russell.

The tablet contributed by the Medical Department of the University of Georgia will recount the distinguished services of Doctor Eve, particularly those rendered as a teacher of surgery in his native land. It is the wish of the authorities of the University that its alumni show their regard for its tenets by attending the ceremonies in honor of this one of its most distinguished teachers. This invitation it is hoped will result in a large concourse of alumni who by their attendance will honor not only the memory of a great man and a founder of the medical department of the University, but will themselves receive new inspiration to go forward in the path of medical ideals.

P R O G R A M

Unveiling Ceremonies to Dr. Paul Fitzsimmons Eve, Hero Polish War for Independence, at Augusta, Ga., November 14, 1931, at 1:30 p.m.

Music.

Call to Order by the Chairman.

Invocation.

Introductory Remarks.

Unveiling of Memorials—Miss Genevieve Eve and Miss Lovelace Eve.

Presentation of Bronze Tablet from the Polish-American Medical and Dental Association by Dr. K. G. Cieslak, President.

Presentation of Bronze Tablet from the Medical Department of the University of Georgia, by Dr. W. L. Moss, Dean.

Acceptance of Memorials by Mayor W. D. Jennings for the City of Augusta.

Address by Nathaniel Spear, Jr., in behalf of the National Commander of the American Legion.

Address in behalf of the Eve family by Dr. Duncan Eve, of Nashville, Tenn., grandson of Dr. Paul Fitzsimmons Eve.

Address by His Excellency, the Polish Ambassador. Address by His Excellency, the President of the United States, or his personal representative.

Music.

BONE AND JOINT TUBERCULOSIS IN CHILDREN*

Clinic

THEODORE TOEPEL, M.D.
Atlanta

Tuberculosis, as the term is currently used, means any pathological formation set up in the animal body by the presence of a specific micro-organism, the tubercle bacillus, as well as any functional disturbance that results from this anatomic change or the activities of the bacilli.

Tuberculosis of bones and joints in children takes third place in frequency, as a cause of disability, being preceded by poliomyelitis, leading the list and then by congenital defects and birth injuries. It is encouraging to know that the number of cases of bone and joint tuberculosis have decreased within the last ten years, due largely to better protection of milk supply, earlier diagnosis, and more rational treatment of the cases. Continued vigilance against contact infection, universal pasteurization of milk, early diagnosis by means of x-ray and tuberculin should greatly reduce tuberculosis during childhood.

The onset of the disease appears from early infancy to ten years; the greatest number of cases occur between three and five years. It is somewhat more common among males than females. The distribution of the disease in order of frequency is: vertebrae, 43 per cent; hip joint, 30 per cent; all other joints, 27 per cent.

So much for the preliminary; the object of this paper is a modest attempt to evaluate scientifically the importance of conservative measures such as rest with extension, the use of sun and ultra-violet rays, mobilization and diet, psychical and sociological conditions in bone and joint tuberculosis in children.

We in Georgia are climatically favorably situated, having an annual mean temperature of 64.6 degrees, or 0.8 degrees above the normal. The highest annual mean temperature during 1930 was 69.3 degrees at Brunswick,

and the lowest was 55.6 degrees at Clayton. The average per cent of sunshine was 60, with a maximum of 84 per cent at Macon in August. The average number of clear days was 156, partly cloudy 101, and cloudy 108.

Rest and diet are fairly well understood and on account of the limited time we will omit discussing the importance of these two important adjuncts in the treatment of bone and joint tuberculosis and invite your patience to a dissertation of the importance of the use of heliotherapy, especially the sun, of which we have such an abundance here in Georgia and of which more of my brother physicians should take advantage.

Bone and joint tuberculosis, a local condition, is but the manifestation of a general disease, it therefore becomes necessary to stimulate the enfeebled resistance of the whole system, in reconstituting the "soil", by intensifying every vital activity which can restore the broken equilibrium, both in the physical body and in the mind, from which the former is inseparable.

Now if the problem of tuberculosis presents itself under this double aspect, its general treatment demands a double condition. To a case of general disease presenting local seats of infection must be applied a general therapy, having in view first the improvement of the general condition, to which must be added a local treatment which, to be rational, should in no way impede the improvement of the whole organism.

Heliotherapy, associated in a natural way with aerotherapy, seems through its double action, local and general, to fulfill these conditions.

On the one hand heliotherapy is the best stimulant to the metabolism and the vitality of the organism; on the other hand, by reason of the analgesic, bactericidal, sclerogenic and resolvent action of the sun's rays, it constitutes the ideal local treatment.

In order that the patient may benefit by this double action it is always advantageous, winter and summer, to use the sun's rays to the whole surface of the integuments.

Heliotherapy exercises a definite restorative influence upon the muscular system, and the

*Informal clinic before the Surgical Section of the Medical Association of Georgia, Atlanta, Ga., May 13, 1931.



Slide 1.
Read Explanation in Contents of Paper.

restoration of this is of great importance in the defense of the organism against tuberculosis. General heliotherapy, in restoring to them their original tonicity and firmness, re-establishes and strengthens the action of these natural levers, and aids the return of the functions of the joints in an eminently physiological manner. In this connection I will only mention the restorative action of the sun's rays upon the blood and upon the general metabolism and the metabolism of salts. In regard to tuberculosis of the joints, the most striking action of such general heliotherapy is shown by its influence upon the bones. Mineral metabolism is so favorably modified by the action of the sun's rays that the amount of calcium and phosphates in the blood rises, not only to normal but even passes the acid-basic equilibrium, contributing thus to the recalcification which is clearly shown by radiographs.

This recalcifying property, which I used in my early entry into the practice of medicine very crudely, merely by insisting upon the exposure of the whole body to the sun's rays, and later using it in selected cases of bone and joint tuberculosis and rickets, has been confirmed by Hess in a number of articles in the *Journal of the A.M.A.*, and by Huedchinsky in Germany in regard to the action of ultra-violet rays.

In order to combine rest, extension and exposure to the sun's rays, it has always been my practice to fix the body or the extremity with an apparatus made of webbing, which immobilizes the diseased articulation only, allowing freedom to other joints, and by gentle extension, keeping the affected joint

in perfect rest and not depriving it and the balance of the body of the restorative action of the sun's rays.

A frequent checking up with radiographs is necessary to observe the progress of the diseased condition.

To treat the mind as well as the body, which is as previously mentioned inseparable, manual occupation is a real therapeutic factor in the arresting of tuberculosis, this manual work must be progressively and carefully adapted to each individual. It is self evident that the work is carried on in the sun whenever possible, but is suitable for any weather. It is a powerful protection against boredom. Thus by careful combination of the method of treatment as previously outlined and the work cure, with their double influence, psychological and physical, on the patient, we realize successfully that rational therapy of healing nature, which aims at the active immunization of the organism, by stimulating the natural forces of defense against the infectious agent.

But the arresting of bone and joint tuberculosis is but half the battle: the ground gained must be consolidated, and for this reason the follow up work of our old patients should be a constant source of anxiety. Too often, convalescents, and particularly those without means, return to unhealthy homes, workshops or factories, where the hygienic conditions are such that relapse is a constant danger. The best way of assuring the tuberculous patient against a return of his disease is to maintain his general condition in a state of vigorous defense. To accomplish this the physician, the patient and the State must work in close co-operation.

This subject of bone and joint tuberculosis should appeal to every lover of children, because the child has its whole life before it. It is either destined to remain forever handicapped, a liability to society, condemned to a life of isolation with a more or less morose mind; or an asset to society, the child may rejoin the companionship of healthy children and be one of the many, partaking of nature's stimuli with a mind receptive to the uplifting youthful exuberance of joy and pleasure.



Slide 2.

Read Explanation in Contents of Paper.

I will now show you some slides showing the results of the treatment as outlined in the paper. The first slide, that of a young man, age 18 years, shows clearly the broken down body of the fifth lumbar vertebrae with rarification of the transverse processes and the reconstruction of the body after eighteen months of treatment. These pictures were made in 1922 and 1923 and there has not been any relapse into the former disability from pursuing his daily occupation of piano tuning. The second slide shows the restoration of the seventh cervical vertebrae after fifteen months of treatment with no relapse after five years of observation. A paralytic condition of the right arm prevailed when patient first was brought to me. Third slide shows involvement of the bodies of the fifth and sixth dorsal vertebrae with a decided posterior angle and the reconstruction of the bodies and a new alignment of the vertebral column after two years of treatment of rest extension and exposure to sunlight and ultra violet rays. The next three slides show the method of immobilization with extension by straps of webbing so as not to interfere with the curative effect of the sun's rays or the ultra violet rays. In order of rotation I am showing the method of immobilization and extension of the spine, the shoulder and the ankle.

526 Candler Building.

ETIOLOGY OF INFLUENZA: TRANSMISSION EXPERIMENTS IN CHIMPANZEES WITH FILTERED MATERIAL DERIVED FROM HUMAN INFLUENZA

Perrin H. Long, Eleanor A. Bliss and Harriet M. Carpenter, Baltimore (Journal A. M. A., Oct. 17, 1931), transmitted disorders characterized by fever, prostration and a leukopenia to three chimpanzees by intranasal inoculation with bacteria-free filtrates of rhinopharyngeal washings obtained from individuals ill with human influenza. A similar condition was produced in an ape during a nonepidemic period by means of an intranasal inoculation with unfiltered influenzal material which had been preserved in the icebox for 123 days.

THE MANAGEMENT OF THE MENOPAUSE*

JACKSON W. LANDHAM, M.D.

Atlanta

Any intelligent consideration of the menopausal period should include an outline of the facts and present theories concerning the period of puberty and the normal menstrual cycle.

Puberty is the most interesting evolutionary epoch of female life and is characterized by many physical and psychic changes. The intellect, emotions and will of the girl rather rapidly become those of the woman. There are anatomical changes in the larynx of the adolescent resulting in the characteristic voice of the adult. The face and figure acquire the characteristic contour of the sex. The internal and external sexual organs with their accessory structures increase in size and vascularity and the onset of menstruation is established. In some normal females it may be several months or a year before a definite menstrual habit is formed.

The normal menstrual habit of the individual is attained when a correlated, balanced function of the pluri-glandular endocrine structures involved in menstruation occurs.

Certain changes that take place regularly during the onset of puberty, menstruation and pregnancy warrant including the ovary, pituitary, thyroid and suprarenal as the most important glands concerned at these physiologic periods. Scientific research in the study of the ductless glands has been developed sufficiently to clearly demonstrate that the secretions of many of the endocrine glands contain many hormones instead of a single hormone with limited function. The hormones of the ovary have been difficult to isolate and we do not know what part of the gland produces them on account of the fact that they are not stored in the ovary. Theelin, isolated by Doisy, is found in the urine of pregnancy. This hormone produces estrus in ovariectomized rats but there seems to be some question as to whether the hor-

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mone is formed by the Graaffian follicles, the placenta or the corpus luteum, or by all three. There are three distinctly different types of cell structure in the ovary; the follicular, corpus luteum and the interstitial. It is probable that each of these types produces a hormone having a stimulating or inhibiting effect upon menstruation.

Two hormones have been isolated from the posterior lobe of the pituitary gland, the alpha or oxytocic and the beta or pressor. The hormones of the anterior lobe have not been isolated but experimental studies indicate that there are three distinct functions performed by secretions from this part of the gland. These suspected hormones are the growth, lactation and the gonad-stimulating. The gonad-stimulating element plays an important part in menstruation and the menstrual irregularities. When suitable extracts of the anterior lobe of the pituitary are injected into immature female rats, the ovaries show evidence of stimulation, with the development of follicles, ovulation and the formation of hemorrhagic follicles and corpora lutea. Transplants of anterior lobe tissue from healthy, mature female rats into immature female rats produce similar results. Transplants or extracts from the anterior lobe of the pituitary do not produce estrus in ovariectomized animals, showing the hormone acts only as a stimulating or activating agent on the ovary in the menstrual cycle.

There is a physiologic increase in the size and secretion of the thyroid gland during puberty, menstruation and pregnancy. Basal metabolism tests determine the function of the thyroid in reference to the presence of thyroxin but it is probable that there are other hormones of the thyroid not yet isolated whose activities are not indicated by basal metabolism tests. Functional hypertrophy of the suprarenal glands has often been observed in pregnancy and during menstruation. Normal menstruation is dependent upon a correlated, balanced function of this complex multiglandular activity.

Abnormal menstruation dating from puberty or soon after is usually manifested as oligomenorrhea or amenorrhea, but occasion-

ally there are cases of menorrhagia or metrorrhagia. Amenorrhea or oligomenorrhea with a rather characteristic obesity will occur in women who have a marked hypo-function of the gonad-stimulating hormone secreted by the anterior lobe of the pituitary gland although they may have ovaries capable of normal function. Menorrhagia or metrorrhagia will occur in women with normal ovaries but who have a hyperfunction of the gonad-stimulating element of the anterior lobe of the pituitary gland. Overactivity of the ovaries results in excessive and prolonged menstruation while hypofunction of the ovaries causes oligomenorrhea or amenorrhea. Dr. Fred Emmert of Saint Louis University, states that in all cases of hypofunction of the ovaries both the ovaries and the anterior lobe of the pituitary are insufficient. Since x-ray therapy over the pituitary gland controls some of the menorrhagias and metrorrhagias, it certainly indicates that hyperfunction of the gonad-stimulating hormone is an important etiologic factor in those patients responding to such therapy.

The term menopause as considered in this paper is used to indicate that period of life in which there is an involution of the genital structures and coincidentally a pluriglandular effort of the other endocrine structures correlated with the gonadal system to compensate for the deficiency of the ovarian function. While ovarian insufficiency with cessation of menstruation is the outstanding feature of this period, it is only one of the factors to be considered. The menopause may be physiologic or pathologic and there are many patients approaching the end of the active child-bearing period who have pathology or symptoms that justify the production of an artificial menopause.

The physiologic menopause usually occurs between the 38th and 50th years of life and is characterized by a gradual extinction of ovarian function indicated by less frequency in the menstrual periods and a smaller quantity of the flow. In the normal menopause there is a sufficient period of time for the correlated endocrine structures to compensate to a great extent for the progressive

hypofunction of the ovaries and there should be no symptoms that would occasion any marked discomfort to the patient. However, the normal menopause occurs at an age of sexual activity and in the fullness of social life and is accorded undue apprehension by most women entering this period. The highly temperamental and apprehensive patient should be given psychotherapy and assured that certain diseases that have been attributed to the menopause such as cancer, high blood pressure, insanity, Bright's disease, diabetes, heart disease and many other conditions are a coincidence and have no connection with the menopause.

Hot flashes and nervous symptoms may require ovarian extract administered hypodermatically and x-ray treatments over the pituitary. Recently I obtained good results by giving x-ray treatments over the suprarenal glands in a patient who had previously been treated over the pituitary gland and given whole ovary and theelin for hot flashes.

There is a large group of women in whom the onset of the menopausal period is characterized by marked pathologic phenomena. The predominating local manifestation of this is uterine hemorrhage which may occur as the initial symptom of the menopause. These hemorrhages may occur regularly with the same rhythm as normal menstruation but there is more frequently lack of rhythm. Tilt's statistics of 637 women showed that in 26 the menses stopped by slow degrees; in 14 per cent the periods stopped suddenly and the rest suffered metrorrhagias. Kisch's statistics showed that 57 per cent had climacteric hemorrhages. These patients should be examined carefully before attributing the menstrual disturbances to a pathologic menopause. Often on examination of such women one will find uterine fibroids, cervical polyps, malignancies, ulcerations of the cervix and sometimes an extopic pregnancy. Yet, there are many cases of uterine hemorrhages in the menopausal age that reveal no general or pelvic abnormality on careful examination. These cases have been diagnosed "hemorrhagic metropathy" or "functional uterine hemorrhage" and are probably due to en-

docrine disfunction. These hemorrhages, especially when complicated with a uterine fibroid, may become serious by prolonging the menopausal period and accentuating all of the subjective symptoms of the menopause.

The pathologic menopausal group, consisting of the hemorrhagic, those complicated by uterine fibroids and those showing potential or frank malignancies of the cervix should be treated by means of radiotherapy. The fibroid and hemorrhagic group, without demonstrable pelvic or general pathology, should be treated with roentgen ray to the point of an artificial menopause, avoiding the production of a precipitate menopause.

Patients who have lesions of the cervix that are potentially or frankly malignant should be treated by a combination of radium and deep roentgen ray therapy. Radium should be applied in the cervical canal which is in contact with the lesion and a dosage of 3,000 to 5,000 milligram hours given. Deep roentgen ray therapy in cross fire methods should be given over the external pelvic surfaces.

There is another group of women who have during the child-bearing period pathologic conditions that demand the production of a period of amenorrhea or an artificial menopause. This group includes women in whom there are marked menstrual disturbances complicated by advanced tuberculosis, diabetes, essential hypertension, migraine, nymphomania, asthma, uterine fibroids and potential or frank malignancies of the cervix.

I have treated patients who were in the active child-bearing period for these conditions with very satisfactory results. There were no marked post-menopausal disturbances following the treatments which would indicate that there is an internal secretion of the ovary that is not destroyed by radiotherapy.

A submenopausal plan of treatment, producing a rather long period of amenorrhea, may be tried first experimentally in all of the conditions just mentioned except the potentially or frankly malignant lesions of the cervix. Fibroids of the uterus that would require removal of the uterus if treated surgically should be treated with the roentgen ray to the extent of a menopause.

Summary

1. A brief outline of puberty showing endocrine changes is given.

2. Physiologic menstruation and the hormones known to be concerned in its mechanism are considered.

3. The physiologic or normal menopause is infrequent compared with the group of cases that manifest pathologic phenomena. The outstanding abnormality is uterine hemorrhage.

4. The pathologic menopause and patients in whom an artificial menopause should be produced before menopausal symptoms appear are considered, emphasizing radiotherapy as the method of choice in producing the artificial menopause.

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DISCUSSION ON PAPER OF DOCTOR LANDHAM

Dr. James K. Fancher, Atlanta, Ga.—Doctor Landham has made a very clear presentation of the value of roentgenotherapy in certain cases at the menopause. Women constitute a large percentage of our patients and their symptoms are sometimes quite puzzling, often becoming more exaggerated at the time of the menopause. This may occur as young as twenty-five years. At this time there is a cessation of the hormones of the ovary, with a corresponding increase of activity of certain other endocrine glands—the pituitary, thyroid and adrenals; this being an effort on the part of these glands to compensate for the decreased action of the ovary. As we study these patients when they reach the menopause, and find them suffering from various disturbances of the endocrine glands, we realize that perhaps further study of these secretions will in future years help to prevent many of these conditions.

The basal metabolic rate is no longer accepted alone as evidence of thyroid function. It is possible for the pituitary as well as the ovary to cause a variation of the basal rate. Doctor Rowe has stated that any doctor who gives thyroid extract simply because of a low

basal metabolic rate, has no business using glandular therapy.

We know that women are commonly susceptible to ovarian therapy, but as a rule the stock ready-mixed preparations are not indicated, for every woman is an entity in herself. We cannot expect to give one, two or three tablets empirically three times daily and secure results. We must vary the doses to meet the changing conditions of the patient to get the best effect. The so-called "pituitary headache" is simply an effort on the part of the pituitary gland to compensate for the waning ovarian secretion. Theelin is a crystallized product, the ovarian follicular hormone, and although it is isolated from the urine of pregnant women, the ovarian follicular hormone is also isolated from other sources. We do not use Theelin at the menopause. We have had some good results with it in some cases of dysovarianism with scanty flow. In many cases at the Good Samaritan Clinic we have obtained good results with whole ovary extract given by mouth alone. In some cases where the symptoms are pronounced we use hypodermic injections as well. Endocrine therapy is of value in many cases during the menopause. Roentgenotherapy is of value in certain selected cases, as Doctor Landham has clearly demonstrated, especially in the precancerous stage and in stopping hemorrhage. I believe that this treatment, which is comparatively new, will eventually have a place in these cases, just as much as the use of organotherapy, in capable hands.

Dr. George A. Traylor, Augusta, Ga.—I doubt if a more important subject will be brought to the attention of this meeting than the one just presented by Doctor Landham. If some one consults us for hemoptysis there is no diagnostic means at our command that we would not employ in our efforts to find out the cause of the bleeding. We should be just as meticulous concerning bleeding from the female genital tract.

Dr. L. C. Allen, Hoschton, Ga.—This condition is so very important that I cannot let the opportunity pass of throwing out a warning. I think the great mistake the general practitioner makes in these cases is that he treats the patient without making a thorough examination and diagnosis. The general practitioner is too apt to take the woman's statement that she "is having change of life," or to assume that these hemorrhages are due to the menopause, and proceed to give various kinds of drugs for varying lengths of time without really making an examination to determine the cause of the trouble. No longer than a few weeks ago a lady consulted me who had been treated by her family physician for eight months. He told her the condition was due to "change of life." She was almost exsanguinated and had to be brought into the hospital in an ambulance. Examination revealed a cancerous growth as large as a grapefruit in the pelvis. Another lady had been treated for two years by reputable physicians for excessive menstruation, and had been told that her condition was due to

hysteria and nervousness. No pelvic examination had been made, but upon examination we found a polyp three inches long and as large as three fingers. I have encountered many such cases. We should never take it for granted that these conditions are due to the menopause. The proper thing to do is to make a careful examination in every instance, assuming always that the condition is due to some trouble other than the change of life.

Another point that I think well worth calling attention to is the fact that a considerable number of these cases of metrorrhagia at the menopausal age and before are unquestionably due to pellagra. Radium is a one hundred per cent remedy for these cases.

Dr. Jackson W. Landham, Atlanta, Ga. (closing). I understood Doctor Fancher to advocate giving whole ovary by mouth in the control of the nervous disturbances during the menopause. It has been determined by the Council on Pharmacy of the American Medical Association that none of these organ preparations is effective when given by mouth, except thyroid. The others are all destroyed by the acid in the stomach.

I was very glad to hear Doctor Traylor and Doctor Allen emphasize the importance of thorough examination in these cases. In my paper I stated that many of them are due to conditions other than the menopause. Many patients have been referred to me who have never had a pelvic examination. In many of these cases we find a polyp or a small growth which can easily be removed. If not discovered, the menopause may have taken place somewhat later without marked disturbance. The menopause may occur suddenly, and in those cases the ovarian extract, the whole extract, given hypodermically, every day if necessary, or twice a week, to control the nervous symptoms will prove more effective than anything else I know of.

DIPHtheria TOXOID (DIPHtheria ANTA-TOXIN-RAMON) IN INFANCY

JOSEPH GREENGARD, Chicago (*Journal A. M. A.*, July 25, 1931), vaccinated 117 infants, ranging in age from four days to two years, against diphtheria with two 1 cc. doses of commercial diphtheria toxoid. Complete immunity, as measured by the Schick test, was obtained in 98 per cent of the infants. The appearance of immunity was quite rapid, a considerable proportion showing a negative Schick reaction two weeks after the second injection. Reactions were noted in only two of 147 cases; both of these were very mild. In a small group in whom the persistence of immunity was tested, one case occurred in which the Schick reaction turned positive six months after vaccination. Three cases of clinical diphtheria occurred during the period of investigation. One of these appeared in a vaccinated child with a succeeding negative Schick reaction. On the basis of his observations the author concludes that immunization against diphtheria, as measured by the Schick test, can be produced rapidly and safely in a high proportion of infants by the use of two 1 cc. injections of diphtheria toxoid.

RECENT ADVANCES IN THE PREVENTION AND TREATMENT OF DISEASES IN CHILDREN*

JOSEPH YAMPOLSKY, M.D.

Atlanta

"It is a noteworthy fact," says Dr. Isaac Abt¹ in his introduction to the 1930 Year Book of Pediatrics, "that twenty-five years ago not a half dozen men in America practiced pediatrics exclusively. Today there is not a city in America of any consequence that has not at least one outstanding man, who devotes his time entirely to pediatrics. It is surprising to see how much has been added to our knowledge of diphtheria, meningitis, syphilis, rickets, scurvy, measles, scarlet fever, and the problems of feeding children."

The progress of pediatrics has been directed in the last decade toward preventive diseases and it is my purpose to discuss some of the outstanding achievements in the short time allotted me.

After the epoch-making discovery of the diphtheria bacillus, followed later by successful discovery of the toxin and the use of antitoxin in the treatment of diphtheria, it was natural that, with the marked decrease in the mortality of the disease, an attempt should be made to eradicate a disease which ranked at the very top of the list of mortality in children. Through the efforts of Zingher, Park, and others, toxin-antitoxin was finally developed. A series of three injections, followed later by the Schick test, has immunized the great majority of patients. Schwartz and Janney², in a study of school children in Milwaukee injected with three doses of toxin-antitoxin, showed repeatedly that about 25 per cent of the patients were insufficiently immunized against diphtheria, while 75 per cent were fully protected. They also noted that serum sensitization is more prevalent in children previously injected with toxin-antitoxin.

Although Park has repeatedly stated that 18 per cent of all children would always react to injections of horse serum, he has not found a greater danger of serum sensitization following toxin-antitoxin immunization than in children not immunized with this

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mixture. The fact remains, however, that there is a constant fear in the minds of many pediatricians in not desensitizing their patient when horse serum has been given following the toxin-antitoxin mixture. For that reason, sheep serum has been used to a great extent when toxin-antitoxin mixture was to be employed.

Although the use of toxin-antitoxin is still more prevalent in the United States than in other countries, there is no question that the use of toxoid is becoming more popularized. Toxoid is a preparation made by detoxifying diphtheria toxin with formaldehyde. It is stable, non-toxic, containing no foreign serum and for that reason cannot produce sensitization to subsequent serum injection. The standard use as described by Ramon⁸ is as follows: An initial injection of .05 cc.; after three weeks, a second injection of 1.0 cc. and two weeks later, a third injection of 1.5 cc. should be given. Some prefer to give only the first two injections. At the Pasteur Institute, Schick tests done six weeks to two months later were 96 per cent negative. Marked reaction to toxoid in form of local inflammation and general indisposition have been registered. Most of these reactions are seen in adults and in children over six years of age. It may be that in these individuals the goat mixture of toxin-antitoxin would be more suitable. However, the reaction should not be disregarded.

It is probable that since toxoid conforms such great immunity in the majority of those injected the percutaneous method of Loewenstein will become more popular. Abt⁴ describes his experiences with this method. The technic is as follows:

Either the back, the chest, the abdomen or the arms can be used as the site for the rub. The choice in each case depends on the size of the child. In smaller children the arms do not offer a sufficiently large absorbing surface, so that either the back or the chest and the abdomen should be used. The skin is prepared with ether to remove the natural body oils and scales. This is followed by the application of alcohol, which is allowed to dry. The contents of a single tube containing the preparation are applied and rubbed in, either the finger tips or a small wooden

spatula being used. This takes from about two to three minutes. The ointment dries shortly, leaving a yellow coating resembling in appearance dried glue or shellac. The surface is not washed for twenty-four hours.

As Abt's⁴ tables indicate, sixty-two children were treated with Loewenstein's ointment. Of this number, forty-four children, or 70.9 per cent, showed negative control Schick tests after variable periods. This percentage agrees with the results obtained by Baar and Grabenhofer who treated twenty-six children. Loewy was the first to use the Schick test as a control before and after treatment with Loewenstein's ointment. Her results on 500 children showed 68 per cent negative Schick tests. These percentages for the percutaneous method compare favorably with the figures reported for the toxin-antitoxin mixture.

They conclude as follows:

1. The clinical experience and the immunologic studies with Loewenstein's percutaneous method of immunization against diphtheria are sufficiently satisfactory to justify its use.
2. It is a simple, practical and expedient method, which produces active immunity against diphtheria in as large a percentage of cases as is induced by other methods now in general use.
3. It avoids the dangers which may occur by introducing a foreign protein directly into the lymphatic circulation.
4. It eliminates the danger of liberating free toxin in the system.
5. It avoids the occurrence of constitutional reactions.
6. It does not sensitize the child to other serums.

If long tried clinical experience proves Loewenstein's percutaneous ointment to be an immunizing agent of definite value, its use will become the method of choice.

In treating congenital syphilis for the last twelve years, it has been my experience that the disease is more common than it is usually thought of and that the treatment presents certain difficulties, especially in the very young children.

The usual method of treating very young children has been by injecting the arsenicals and mercurials deep into the gluteal muscles. Intravenous treatment and through the longitudinal sinus has been found, many times, to be too difficult. The number of sore buttocks encountered when the treatment was given intramuscularly led us to attempt a new method of treatment.

Since many medications have been given for some time intraperitoneally, I decided to experiment on rabbits for the purpose of determining the value, as well

as the dangers, of giving both mercury and neosalvarsan when administered in the peritoneal cavity.

This work was begun by myself and Dr. George F. Klugh⁵ the latter part of 1923, and the results, which are to be described later, were presented by us to a local medical society. Rosenberg⁶, a few months later, reported a case which proved to us conclusively that we were on the right track. The experimental work was done on many young rabbits. Some rabbits received one-tenth of a gram of neo-arsphenamin for every fifteen pounds (7 Kg.) of body weight; others received mercurosal, one-half grain (0.03 gm.) for every thirty pounds (14 Kg.) of body weight, and the last group were given alternating doses of neo-arsphenamin and mercurosal every other week, intraperitoneally, in the same dosage as the first two groups. The dilution of the neo-arsphenamin was one-tenth of a gram for every two cubic centimeters of distilled water. The mercurosal was given as dissolved in ampules.

When larger doses were given, toxic symptoms were the result and in doses given normally to human beings, no toxic reactions were noticed. These treatments were given for about twenty weeks. At autopsy the rabbits showed no signs of adhesions or peritonitis, showing that the drugs were absorbed without producing any pathology in the peritoneal cavity. The injections are given intraperitoneally a little below the umbilicus and to the left with a dull needle. They are given rapidly into the peritoneal cavity. The dose is as follows: Neo-arsphenamin is given 0.1 gram in a 2 cc. solution of normal saline for every fifteen pounds (7 Kg.) of body weight of the patient. The mercurosal is given as it comes in solution, and the dose is 0.5 grain (0.03 gm.) for every thirty pounds (14 Kg.) of body weight of the patient. A course of treatment consists of sixteen weekly injections, the neo-arsphenamin and mercurosal given alternately every week. Thirty days of rest are then allowed and a Wassermann test is done on the patient. If the Wassermann is negative, sixty days are allowed to elapse before the next treatment is given. If the Wassermann test is positive, sixteen more injections are given at once. Two courses of treatment are required during the first year of life.

The value of giving these treatments in early life can only be estimated properly when we realize that the disease in infancy is in acute form, and next to the intravenous method, this is certainly the best. Absorption from the peritoneal cavity is rapid and there is absolutely no discomfort after the treatment.

The following is a resume of my series of twenty-six cases. Most of these cases have been in very young babies.

Case 1. Father and mother both syphilitic. Patient's twin died of syphilis. Patient given twelve alternating injections of neo-arsphenamin and mercurosal intraperitoneally. Patient laughing and smiling immediately after treatment and there was no colic, pain, or toxic results. Previous to this treatment, suffered very much when given intramuscular treatment. Patient looks

well with no signs of congenital lues. Wassermann still positive.

Case 2. This patient was treated by Dr. M. Hines Roberts privately. Patient was in such physical condition that Doctor Roberts thought that any treatment might be tried. Patient is now robust and healthy, shows no signs of congenital lues and his Wassermann is negative.

At no time did these two patients show any after effects, and the mothers seemed to be well satisfied with the progress of their children.

These cases were then referred to Dr. J. W. Landham for x-ray examination. The following is Doctor Landham's report on the gastro-intestinal tract of both patients: "Fluoroscopic examination of the abdomen following the administration of an opaque meal shows structures of the lower gastro-intestinal tract to be in normal position and movable on palpation. No evidence of adhesions was observed. X-ray examination of the gastro-intestinal tract following administration of an opaque meal shows no evidence of adhesions or abnormal position of any of the structures of the gastro-intestinal tract. In view of these findings and the experiment on rabbits that you have done, with the results of which I am familiar, I consider your plan of intraperitoneal therapy of decided value."

Case 3. R. S.: white, six months of age, mother's Wassermann four-plus. Mother had two normal children followed by a miscarriage. Baby normal up to three months, when the mother noticed that the child's head began to grow large. No convulsions, not able to hold up head, undernourished, head eighteen and five-tenth inches in circumference, fontanelles open, slightly bulging, no teeth, slight rickets. Blood Wassermann four-plus, spinal fluid under pressure, Wassermann two-plus, globulin one-plus, fifteen cells per cc. Eight doses of neo-salvarsan and eight doses of mercurosal given mostly intraperitoneally. At ten months of age the child was sitting alone, holding up its head, crawling on the floor; circumference of head nineteen and five-tenth inches, fontanelles open, blood and spinal fluid Wassermanns both negative. Since last report patient has had another series of treatments and the blood and spinal Wassermanns are negative.

Case 4. O. A.: three months of age, cries all the time, birth Wassermann negative, now positive, always undernourished, pustular eruption on whole body, condylomata of anus. Sixteen injections, rash disappeared, baby gained weight and blood Wassermann negative.

Case 5. eight months of age, malnourished, box-shaped head, old man facies, saddle nose, all glands palpable, rosary, pigeon-shaped chest. After sixteen injections, disappearance of glands, old man's facies disappeared, glands not palpable, Wassermann still four-plus.

Case 6. W. A.: seven months of age. Mother claims baby won't get fat, fed on breast and cow's milk, blood Wassermann four-plus. After one course

of treatment, this child improved remarkably. Wassermann negative.

Case 7. D. L.: one month of age. Marked syphilitic stomatitis and rhagades. Mother's Wassermann four-plus, baby's Wassermann four-plus. After one course of treatment, stomatitis and rhagades disappeared. Wassermann negative.

Case 8. T. P.: Pseudoparalysis of left arm. Mother and baby's Wassermann four-plus. After one course of treatment, Wassermann negative and baby has perfect use of left arm.

Case 9. A. A.: five months of age. Mother and baby's Wassermann four-plus. Child has nystagmus, condylomata of anus and impetigo luetica. This child's physical signs cleared up, but it required thirty-two injections to reverse the Wassermann.

Case 10. B. F.: five months of age. Mother, child, and one brother's Wassermann strongly positive. Baby has typical secondary syphilitic eruption on body and condylomata of anus. This case showed improvement after the first few treatments, but the Wassermann remained positive.

Case 11. Child, three months of age. Father gives history of syphilis, mother and child's Wassermann strongly positive. Baby is pale, anemic, restless, suffers from constant colds, has pseudoparalysis of left arm, and liver is three centimeters below the costal margin. This patient improved remarkably and after the first course of treatment, showed no signs of syphilis and had a negative Wassermann.

Case 12. A. S.: three months of age. Cries and frets all the time, is restless, has snuffles, cervical glands enlarged and spleen palpable. Mother and baby's blood strongly positive. Marked improvement and gain in weight after eight injections. Patient now has negative Wassermann.

Case 13. J. T.: one month of age. Mother has strongly positive Wassermann, one stillbirth. Child's blood strongly positive and does not use left arm. After sixteen injections patient is apparently well. Wassermann negative.

Case 14. M. J.: nine months of age. Mother and child's Wassermann strongly positive. Cannot sit up alone, has macular rash all over body, scanty hair, mucous patches in mouth, condylomata of anus. All these signs disappeared and patient is gaining in weight. Wassermann negative. Sixteen treatments given.

Case 15. E. S.: two months of age, premature, birth weight three pounds, fifteen ounces. Mother gives history of one miscarriage. Wassermann negative at birth, baby's Wassermann strongly positive now. Patient has constant colds and is greatly undernourished. After a series of treatments baby is improved and slowly gaining. Wassermann negative.

Case 16. J. B.: one month of age. Parent's and baby's Wassermann strongly positive. Marked excoriation about mouth, palms of hands and soles of feet peeling. After eight injections patient's symptoms disappeared and Wassermann is negative.

Case 17. A. M.: six months of age. Condylomata of rectum, mucous patch on tongue, Wassermann strongly positive. Sixteen treatments of neo-arsphena-

min and mercurosal were given and the Wassermann is now negative.

Case 18. V. R.: two weeks old. Cord Wassermann strongly positive, mother's Wassermann positive. No symptoms of syphilis to be noticed on examination. Sixteen treatments as above given and the Wassermann is now negative.

Case 19. E. C.: one month of age. Scar on face that will not heal up by ointments. Wassermann four-plus. After eight treatments of neo-arsphenamin and mercurosal the scar healed and the Wassermann is now negative.

Case 20. New-born baby. Mother's Wassermann four-plus. Baby's cord and sinus Wassermann four-plus, but no signs of syphilis. One course of treatment given. Wassermann now negative.

Case 21. Six weeks old. Can't raise right upper extremity, no history of syphilis. X-ray shows marked osteo-chondritis. Wassermann and Kahn four-plus. In a few weeks was able to use arm and is perfectly healthy now. Given ten treatments, patient did not return for further treatments.

Case 22. Premature baby, six months of age. Patient undernourished, chronic diarrhea. Third child, the first two miscarried. Wassermann four-plus, long bones show periostitis. Child received two courses of treatments and the Wassermann is now negative.

Case 23. Two-months-old baby. Box-shaped head, craniotabes, cries all the time. Wassermann four-plus. Mother says doctors told her she had bad blood. At four months of age child markedly improved, gained four pounds, does not cry. One course of intraperitoneal treatments given, did not return for Wassermann test.

Case 24. Baby, two months old. Does not gain in weight, jaundiced, cries all the time, has wretched appearance, condylomata about rectum, mucous patches on tongue, Wassermann four-plus. This patient received a full course of intraperitoneal medication and is now completely well. Wassermann negative.

Case 25. Patient seen at birth. Snuffles, weight four pounds, weak cry, Wassermann of both mother and child, four-plus. This baby began immediately to gain weight and at six months weighed twelve and one-half pounds. Wassermann taken after thirty-two injections was negative.

Rosenberg⁹ reported that he gave an injection of neo-arsphenamin intraperitoneally with no untoward results. Since our work has been published it has been corroborated by Grulee⁸ and Sanford¹⁰. Many intricate treatments are published in the literature from time to time, which cannot be of practical value in every-day practice, as great skill is required to obtain results. The treatment of syphilis in children has been neglected, partly through ignorance and partly through some difficulties encountered in the course of treatment. This method is pleasant to the doctor

and patient and requires only the ordinary precautions of asepsis.

In conclusion I wish to state:

1. That twenty-six cases of congenital syphilis treated by intraperitoneal methods are presented for your consideration. The patients received neo-arsphenamin and mercurous intraperitoneally. Only four of these cases present a positive Wassermann reaction after treatment, but none shows any signs of congenital syphilis.

2. These medications caused no discomfort, death, peritonitis or adhesions, as shown by the autopsies on rabbits and x-ray examination of the patients. The patients are all alive and feel well.

3. The method is simple, requires only sterile instruments and there is no fear of doing any harm to the patient.

4. Absorption is very rapid from the peritoneal cavity and the results are just as quick as when these medications are used intravenously.

Scarlet Fever

The present development of scarlet fever biological products is based solely upon the work of the Dicks¹⁰, whose results were announced in 1923 and 1924. In their experiments it was proven that the scarlet fever streptococcus produces a potent soluble toxin which is responsible for the toxemia, nausea and rash, and that recovery from the disease with subsequent immunity depends on the production of an antitoxin.

For that reason the Dicks believe that the discovery of the toxin of scarlet fever and of the corresponding antitoxin has furnished the means for controlling the disease through the development of: (1) a method of identifying scarlet fever streptococci; (2) the control of quarantine by means of cultures of material from the nose and throat made on blood agar plates; (3) a skin test for determining susceptibility to scarlet fever; (4) a method of active immunization of susceptible persons, and (5) an antitoxin specific for scarlet fever for use in the treatment of patients and in the prevention of the disease.

Their technic of immunization is as follows:

The doses of sterile toxin for active immunization should be graduated, beginning

with 500 skin test doses in the first injection and increasing to 80,000 or 100,000 skin test doses in the last. The injections are made subcutaneously at intervals of one week. If the full amount is given in each dose, the five doses may be counted on to immunize completely 95 per cent of susceptible persons, and to modify considerably the susceptibility of the rest. Two weeks after the last dose is given, another skin test is made, using 0.1 cc. of the skin test solution or one skin test dose on the right arm, and 0.2 cc. or two skin test doses, on the left arm. If the reaction on either arm is positive, the fifth dose is repeated.

Unless the immunization is carried to the point of a negative skin reaction, complete protection against scarlet fever cannot be expected, although the severity of a subsequent attack would be modified by the partial immunization.

The reaction from immunization doses is sometimes mild and in many cases may be very severe. The most highly susceptible persons react to the milder doses more strongly. The Dicks believe that general reaction after each dose may be expected in about 10 per cent. In my own practice I found many times severe local reactions and very few general reactions. This is probably the main reason why the immunization for scarlet fever has been so little popularized. Although the number of patients immunized against scarlet fever in my own practice has been limited, I feel that it is slowly taking its place in preventive medicine.

I have had opportunities to treat several patients with scarlet fever antitoxin. Early treatment and adequate dosage will produce results that are sometimes unbelievable. One sometimes wonders if the patient really suffered from scarlet fever. The rash melts away and the toxic symptoms disappear shortly. The American dosage is usually 30,000 units. I do not advise the giving of antitoxin if the patient is seen after three days illness. The serum reaction seems to be the only objection to the use of scarlet fever antitoxin. It is true that reaction may be severe, but it lasts only about two days and the end results will prove the full value of the antitoxin.

Felix Von Bormann¹¹ gives his results on observation in 1,000 cases of scarlet fever. Initial relief of toxicosis was obtained in all severe toxic cases, the exanthemata disappeared in thirty-six hours, the pharyngeal symptoms improved and the fever fell by lysis. In light cases he advises against the use of serum except in state of toxicosis, as many complications, such as synovitis, otitis, lymphadenitis and nephritis were more frequently observed in the treated cases. Since the scarlet fever serum is strictly antitoxic, it should be injected early and only in the state of toxicosis.

Measles

The problem of immunization, partial or complete, against measles is certainly of interest, for the cause and treatment of measles has for centuries baffled the best of medical minds. While the etiology of measles is still unknown, it is believed that a streptococcus is responsible for the disease, and we feel that great progress has been made in the prevention as well as the treatment of this disease.

Degwitz is said to have been the first to report the use of parental serum in the prophylaxis of measles. It has, however, been found very impracticable to get serum from many convalescent patients. Morales and Mandry¹² made a study of the relative prophylactic value of convalescent and immune adult measles serum. Their conclusions are very interesting. They are as follows:

1. The prophylactic use of convalescent measles serum with good results has been reported by various investigators.

2. The use of immune adult serum in the prophylaxis of measles has also been encouraged, but little evidence is found in the literature regarding the true value of this agent.

3. Of 120 children exposed to measles by familial contact and immunized with convalescent serum, 102, or 85 per cent, were completely protected. Fourteen of the 18 attacked in this group developed attenuated measles.

4. Of 132 children also exposed to the disease by familial contact and immunized with doses from 20 to 40 cc. of immune adult serum, 108, or 80.3 per cent, received complete protection and 20 of 26, or 76 per cent,

of those attacked developed attenuated measles.

5. Doses of 10 and 15 cc. of adult serum gave complete protection in less than 50 per cent of the persons immunized, but usually resulted in an attenuated or mild form of the disease.

6. Of 183 untreated children (controls) living in the same houses with patients who had clinical cases and with treated children, only 34, or 18.6 per cent, failed to contract the disease.

7. Only 2 children had mild reactions among more than 500 who received treatment with serum.

8. It appears likely that a serious obstacle to the widespread use of convalescent serum will be the objection of some parents to the immunization of their children with serum obtained from strangers.

9. Immune adult serum is readily and universally available, and the technic for obtaining it from adults or children who have had the disease is simple and does not involve any risk.

10. Immune adult measles serum should be used with greater frequency for the protection of exposed children, especially for debilitated children, who would probably die from the disease.

Bivings and Dickson¹³ in describing a series of cases where convalescent serum was used describe their technic and it is so simple that it has been followed by me in all cases.

It consists simply in withdrawing twice the amount of blood as serum is needed from a parent or other suitable donor who has a definite history of having had measles at some previous time. They have found that infiltrating the skin over the vein and using a very large needle prevents premature clotting, and allows sufficient blood to flow out into a sterile container. It is then set aside for from 12 to 24 hours in a cool place. At the end of this time, the serum is easily withdrawn into a large syringe and injected subcutaneously between the scapulae, where there is much loose tissue and little pain or inconvenience to the patient.

As our experience has increased we have found that there are two great factors involved in the results, granting that our donor

has had measles: dosage and time of administration. For complete protection, we found that it is necessary to give a minimum of 0.5 cc. per pound of body weight, and that it must be given on or before the fourth day after exposure. If more time has elapsed, dosage must be increased.

There is practically no reaction and out of 103 patients treated, 71 were given complete protection and 32 developed measles in modified form. I believe that since the protection lasts only for a short time, that not unless the patient is undernourished, has whooping cough, tuberculosis or other debilitating diseases it is best to give the patient a smaller dose, in order that he should develop the disease in an attenuated form.

It is remarkable how light these cases are, and one should always remember that to eliminate the complications of this disease is to decrease the mortality in measles.

Anemia in Children

In 1928, Hart, Steenbock, et al, reported a series of observations on the rat in which they showed that iron was inadequate to bring about regeneration of hemoglobin, but when a small amount of copper was added, regeneration took place rapidly. Certainly it has been proven that certain metals when added to the diet of an individual have a marked effect on hemoglobin production.

At the last meeting of the Southern Medical Association in Miami, Dr. Hugh Josephs presented a paper in which he demonstrated on investigation the value of the use of copper and iron in anemia in children.

Recently an interesting report of many cases of anemia in children between six months of age and seven years was made by Dr. Milton Smith Lewis. The iron used in his cases was in the form of saccharated ferrous carbonate in amounts varying from 15 to 60 grains daily and copper sulphate, 0.5 per cent solution, from one to two teaspoonfuls three times a day. An estimation of the hemoglobin and red blood cells was made weekly and a comparison was made between the rate of increase of hemoglobin and red cells in the patients getting the iron alone at first and later during the administration of iron and copper. Doctor Lewis realizes that a proper amount of food that is varied in its

nature may be sufficient to keep up the proper amount of hemoglobin and red blood cells count in young babies, but the process is very slow and the process may be hastened by the addition of copper and iron.

At Emory University, Dr. Joseph McGhee has been carrying out many experiments on the use of copper as an addition to diet with most remarkable results as to the effects of hemoglobin production.

Several writers have emphasized the fact that anemia due to infection cannot and will not be improved by this treatment. The infection must be gotten rid of first and only then can the anemia be improved by the addition of copper and iron. If this will be remembered the primary thing of importance will be to look after the focus of infection at first.

In young children one finds nutritional anemia to be the most predominant type. These patients will not improve for any length of time nor will they be benefited by transfusions except temporarily. The addition of iron and copper to the diet of these patients produces marked benefit. These cases are seen so often that it behooves us to give them the benefit of the doubt and use the combined therapy.

Lewis concludes that iron and copper given to children with nutritional and secondary anemia is more effective than iron alone and with the addition of copper to the iron, a prompt increase in the number of erythrocytes was seen, the count rising to an average between four and five million within from six to eight weeks. The hemoglobin increased somewhat slowly, but definitely.

This report is in accord with the results obtained by other investigators and I am sure that this form of therapy will take its place in therapeutic pediatrics, although it is possible that other metals will be added to the treatment, as it has been reported lately that cobalt plays a great part in relieving these anemias.

Rickets

In the group of nutritional diseases or those caused by lack of vitamins, I would like to discuss rickets as, in my opinion, more research has been done in this line of en-

deavor, especially in America, than in any other condition.

Hess has repeatedly proven that the variation of the inorganic phosphates in the blood is not an essential or inherent feature in the pathogenesis of healing this disorder. It is only interesting to note that although viosterol is very efficacious in curing rickets that it does not contain vitamin A. Although some writers are of the opinion that rickets is due primarily to a deficiency of vitamin D alone, others believe that this is not true in the full meaning of the word.

De Sanctis and Craig gave to a group of children, viosterol in a liberal amount and to another group gave cod liver oil. The group taking viosterol alone demonstrated that 29 per cent were not protected against rickets, while in the cod liver oil group, only 3 per cent showed signs of rickets, although the amount of vitamin D in the viosterol group was twice the amount to be found in the cod liver oil. It has been stated lately by Hess and his co-workers that viosterol can be given in greater dosage than it was previously thought and that in this dosage rickets can be cured. My personal opinion and experience have proven to me that in the prophylaxis of rickets many factors are involved. There must be some other factor in this predisposition to that condition.

It has been stated by some that irradiated milk and other foods, as irradiated cereals should be fed in attempt to prevent rickets. Steenbock irradiated many cereals, and proved conclusively that although vitamin A and vitamin B are liable to ultra-violet ray irradiation, still their destruction cannot be demonstrated with such an exposure as is necessary to secure the best antirachitic activation. Irradiated milk however has been shown by Husler to be a weak antirachitic remedy.

It has been my experience in the treatment and prevention of rickets to employ different agents to accomplish results. Proper food, proper sunlight, addition of vegetables and cereals (irradiated) at the age of four or five months, the use of cod liver oil and viosterol at the same time will finally bring results. As a prophylaxis and in the treatment the same routine can be employed with greater

dosages of viosterol. Mead's cod liver oil with viosterol has given me some excellent results.

Comment

In conclusion, I wish to state that it is impossible to go into a detailed explanation of the many excellent therapeutic agents we have at our command in the prevention and treatment of diseases of children. Some pediatricians will express their objections to the use of scarlet fever antitoxin. It is possible that in their hands it has not been as successful as in mine. Tumper¹¹ et al. state that clinically it has been amply demonstrated in some of the severe serum reactions to scarlet fever antitoxin, that they were caused by the fact that most of the patients receiving scarlet fever antitoxin had previously received horse serum in the form of toxin-antitoxin. However, I am sure that they will agree with me on the use of toxoid in the prevention of diphtheria, convalescent serum in measles, and iron and copper in secondary and nutritional anemias.

Fantus¹⁵ has reviewed our work in his year book of Therapeutics and he states that as far as he knows we have presented the only complete method of treating syphilis in children intraperitoneally.

The future of pediatrics lies in lines of prevention.

If the life of man should increase in the next quarter of a century, it will be due primarily to the wise treatment of children by the modern pediatrician.

311 Doctors Building.

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DISCUSSION ON PAPER OF DOCTOR YAMPOLSKY

Dr. W. A. Mulherin, Augusta Ga.—As usual, Doctor Yampolsky has presented to us an excellent, practical and timely paper. In the paper he stated that the future of pediatrics lies along the line of preventive measures. I would like to amplify that, and say that the future of medicine lies along preventive lines. The public today is growing more intelligent, and is demanding preventive measures rather than curative. Also, it is very profitable to the laity. It is the most practical side of medicine. Again, we know that 75 per cent of all preventive medicine lies in the pediatric zone, from birth to 15 years of age. Also, one-third or one-fourth of the practitioners' work is in the pediatric zone.

Taking up and stressing some of the points Doctor Yampolsky so well brought out, let us consider first the question of immunization against diphtheria. We know today that the 5,000 children losing their lives yearly from diphtheria is an absolute waste of human life. There is no reason for any child to have diphtheria, for the medical profession can prevent it by immunizing that child. The ideal time for this is at eight or nine months of age, not waiting for the child to grow older. The mother confers a natural immunity on her child which lasts about six months and then wanes, so the eighth month is the ideal time for immunization. I think it is a most disconcerting thing to go into a sick room and find a child choking to death from diphtheria, or dying from typhoid fever which is another preventable disease. The use of toxin-antitoxin, or diphtheria toxoid, is left to the individual preference of the physician. I consider diphtheria toxoid preferable. Another point is that after six years of age children seem to react a little more strongly to the toxoid. This does not require puncturing the baby, which they all resent quite properly.

Regarding scarlet fever immunization, some men use it and others do not. I do not use it because I think it has not yet been perfected. There is some little point that has not been corrected. I do not put it on my list of procedures which I use routinely, to immunize children against infectious diseases; that is, the five punctures. Also, I do not use it in the prophylactic way for there is a pretty severe reaction, which sometimes makes the child as ill as the scarlet fever does. I do not use it as a curative measure for I can get along about as well without it, and there is a question whether it helps any more than keeping the patient's mouth clean, giving plenty of water and treating them symptomatically. In regard to using it as a diagnostic measure, at the University of Georgia we feel justified in doing this. As to breaking quarantine by

swabbing the throat and letting them out on not finding the germ, we do not yet feel justified in doing that.

As to measles immunization, I think it is coming very rapidly, but I believe it is still in the experimental stage. There is an advantage in using blood from the parents, because everyone has had measles, and if it is given early, as Doctor Yampolsky said, four days after exposure the disease can probably be prevented. and after six days it will appear in an attenuated form. It is advantageous to get the attenuated form, for that confers permanent immunization. If they get the other form the immunization lasts for only a few months and then the child can take the disease again. I think there is decided advantage in having the attenuated form.

Regarding the copper in the treatment of anemia, I think there is much to learn about it.

As to vitamins, we have gone vitamin crazy because of advertising. We eat, and smoke, and breathe vitamins, and get excited about them. Adults should use common sense, eating the usual foods, fruits, vegetables, cereals and meat, using plenty of fresh air, and they need not worry about vitamins, but the growing babies need them. They need vitamin D to produce the bone substance and they need Vitamin A to control growth and prevent infection, but we should look upon them as food and not as medicine.

Dr. M. M. McCord, Rome, Ga.—I also wish to commend Doctor Yampolsky for his very scientific and practical paper. I think it is timely to have papers like this presented every year, not so much that we do not know the facts, but we need to have them constantly drilled into our minds until we practice them. We are living in a day of prevention, as has been stated, but that fact does not seem to be appreciated by the medical profession as a whole, as it should be. We depend too much on newspapers, magazines and the State Board of Health to do all the publicity work, and do not ourselves carry out our proportion of health propaganda and help mothers to appreciate for their children the importance of the vaccines. Doctors sometimes even discourage their use when mothers ask for them. I am glad to see vaccines come forward and hope the results we expect may be obtained. It is not so much that the diseases which have been stressed by the essayist are directly dangerous to human life, but because of the consequences which often follow. We know epidemics of measles attack us every year, therefore with a vaccine which prevents measles we can see what it would mean to the human race. Toxin-antitoxin has undoubtedly meant much to the children of the country. The State Board of Health has done splendid work, and I wish to commend the director, Doctor Abercrombie, who is one of the livest wires in the south, in helping to make the public realize the importance of prophylaxis. I think I have seen a great reduction in the number of cases of diphtheria since we have been using toxin-antitoxin. Now, I am inclined to use toxoid for, as Doctor Mulherin said, we can get through more rapidly with two

shots and I believe that the immunity is more dependable.

I have been using the scarlet fever antitoxin for about six years, and have had wonderful results in the severe type of cases. Some children apparently would not have lived for twenty-four hours, but after giving the antitoxin there was such a prompt response that in some cases I have doubted my diagnosis. I think we make a mistake, perhaps, in not using it in the mild cases, for the scarlet fever danger is not from the disease itself, but from the complications, furthermore I have observed that we get more complications in the mild cases, where I have not used the antitoxin than in the severe cases where I have used it. We may find within the next few years that we should use it in all cases, regardless of whether they are mild or severe.

As to viosterol and cod liver oil, we have been told about them by the pharmaceutical houses so often that it is not necessary to repeat their uses. I think one thing we do is to listen too much about the dosage, and to go too far on what the pharmaceutical houses tell us. I think we should study the thing out ourselves. Viosterol is splendid in many instances, but I believe we give it in too small doses, and that if we increase the dose we will perhaps get practically the same results as we do from cod liver oil.

I believe we are soon to see the established virtue in irradiated foods. It would seem that milk offers the best practical opportunity for irradiation, especially dried milk.

Dr. W. W. Anderson, Atlanta, Ga.—During the past four months fifty-seven of my little patients have had measles. Among these fifty-seven children the following complications occurred: otitis media, three; bronchial pneumonia, three; bronchitis, two; severe bronchial pneumonia with relapse, one. The susceptible children, i.e., those who had not had measles, who were directly exposed to these fifty-seven were given an opportunity to try immunization with parent's blood serum. Forty-one children availed themselves of this opportunity. On account of the short duration of immunity with parent's blood serum, it was suggested to the parents of these children that only a sufficient amount of serum be given to let some of them have an attenuated measles. Some of the parents, however, wished their children might escape measles entirely. Of the forty-one children given prophylactic serum, twenty-six escaped entirely, twelve had a modified measles, two had measles of an average severity, and one child had measles of an average severity complicated by discharging otitis media.

The amount of serum administered varied from $\frac{1}{4}$ cc. to 1 cc. per pound body weight. Blood was withdrawn from the forearm and allowed to clot; the serum from this was given intramuscularly. This is a relatively simple procedure.

The most striking fact, however, is the mildness of those children who have an attenuated measles. The rash lasts about three days, with very few prodromal symptoms. The children are usually so well that they continue playing and will not be put

to bed. In looking over the literature, complications are exceedingly rare.

Dr. William H. Kiser, Atlanta, Ga.—I wish to emphasize that the anemia which responds to iron and copper therapy is a special form of anemia. The prolonged milk diet depletes the body of these metals and anemia appears. When the metals are supplied blood regeneration begins and recovery follows. These events are well illustrated by the experiments with rats.

In treating anemia in infants it is important to be sure we are dealing with a case of actual iron and copper deprivation. This was forcibly brought to my attention by an infant of six weeks with severe anemia. The malarial parasite was seen in blood smears and quinine therapy begun. The infant promptly recovered. In this case iron and copper would have been of no avail.

In the rat experiments both copper and iron must be given to obtain regeneration of blood. Either metal alone is without effect. Hart, Steenbock and Waddell discovered this role of copper in anemia. One important consequence of this is that a previously hidden and unknown factor in iron therapy has been brought to light.

Dr. H. R. Slack, LaGrange, Ga.—I have been interested in the paper and have lived long enough to see the great progress of medicine. In 1891 I heard a lecture by Dr. J. Scott Todd, in which he stated that he had treated eight cases of diphtheria. Two recovered, and in those two he mopped the throat out with bichloride of mercury. Whether this cured them or not he did not know, but they recovered. Five years later I went to Johns Hopkins to take a post-graduate course, as I had decided to specialize in diseases of the throat, nose and ear, and I heard Doctor Brooker lecture on diphtheria. He said that since we had had antitoxin he had treated ten cases of diphtheria, and that eight recovered and two died. That impressed me and when I left Baltimore I secured an outfit for treating diphtheria. You who used the early outfits know how cumbersome they were, and 30 cc. was as little as could possibly be given. Where you gave 10,000 units you had to give 60 cc. of the diphtheria antitoxin. This was very painful to the child, but it did the work. That season there was a very severe epidemic of diphtheria in LaGrange, where I was practicing. Two children died of it. The son of a physician living in the county had died and I was called in consultation to see the daughter. The diphtheria antitoxin was given and the girl recovered, and still lives. I gave prophylactic doses to the other children to prevent it. That same summer another case developed and Doctor McRae, who was at that time city physician in Atlanta, was asked to keep a supply of diphtheria antitoxin on hand. We got some from him and every case which was treated recovered. We did not lose a single patient that summer, but everyone who was not treated died. This is mentioned only as a matter of history of the progress of medicine.

Dr. Rufus T. Dorsey, Atlanta, Ga.—I am not entitled to discuss this paper, for I do not treat children, have none of my own, and know relatively little about diseases of children, but I rise to comment on something as old as the hills. Many of the serums have efficacy, but some have only apparent efficacy. As I evaluate doctors for their respective times, I would place first Hippocrates, second Hunter, third the great Sydenham of England. Sydenham wrote an article after he had practiced a number of years in which he said that scarlet fever was not an entity—simply an indisposition, and that practically all of the children got well. He lived to see the day, however, when more people died of scarlet fever in the city of London than ever died before except of the Justinian plague. Then he sat down and rewrote his article on infectious diseases, and frankly said he did not know what he was talking about before. This shows that one man's experience in medicine is not worth a vast deal. At that time he called attention to the fact that there is a rise and fall in the virulence of this, and other infectious diseases, and that it is not contingent on cases here and there or even cases going on from year to year, but a virulence that travels in large circles over a period of time. Undoubtedly some of these vaccines have great and constant efficacy, but we are concluding with enthusiasm that some of them have merit they do not really possess. We may be using some of these serums in one of these long swings of avirulent infection, and before concluding that they are always efficient we should appeal to the historical past.

Dr. L. C. Allen, Hoschton, Ga.—I would like to know what effect the time interval since the donor had measles has upon the potency of the serum.

Dr. Joseph Yampolsky, Atlanta, Ga. (closing).—In replying to Doctor Allen, I wish to state that the potency of measles serum is unknown, but I believe it will last for about six weeks and I think if the child should be exposed to measles some time later I would give the serum again, at least until we find something better.

I brought this paper before you primarily because I know there are many subjects of controversy. I did not present these things to you because I feel that they are all facts. I merely reviewed for you the literature as it has been written, and time will reveal which are facts. I wish to thank all of the men who discussed the paper, and to commend Doctor Kiser for the excellent work he is doing on anemia, and Dr. W. W. Anderson for the interesting report he presented on the use of convalescent serum in measles.

Guinea-pigs inoculated by Hardy A. Kemp, Dallas, Texas (Journal A. M. A., Sept. 12, 1931), with fleas removed from rats that had been trapped at a typhus focus developed lesions characteristic for endemic typhus fever. Animals recovered from an attack produced by this virus were found to be immune to a strain of typhus virus established from the blood of a human patient with endemic typhus.

INTEGRATING THE SERVICES OF PUBLIC HEALTH AGENCIES AND PRIVATE PRACTITIONERS IN THE CONTROL OF TUBERCULOSIS*

MARVIN F. HAYGOOD, M.D.

Alto

About a half century ago Hirsch¹ wrote, "Consumption of the lungs may be traced with certainty in the writings of every period as far back as the earliest attempts of the ancient world to deal with medicine according to methods. History does not inform us, however, of the extent to which the malady had been prevalent during former times in various parts of the world. But there can be no question that pulmonary consumption has held at all times and among all civilized people a foremost place among the national diseases. In our own age, at all events, it occupies one of the leading positions in the statistics of mortality." Norris and Landis² state that "in spite of the fact that the mortality rate from this disease has been steadily falling, tuberculosis must still be looked upon as one of the great scourges of civilization."

Although the organized efforts of public and private health agencies as well as private practitioners of medicine have, during the past quarter century, attacked the problem of tuberculosis with renewed vigor from year to year the Great White Plague still is, in many sections and among large population groups, the "Captain of the Men of Death." The benefits resulting from our endeavors have accrued to a gratifyingly large portion of our people, yet among specific age, race and occupational groups the morbidity and mortality curves are still at a high level.

A more inclusive program looking to the early discovery of cases, prompt application of treatment measures, the prevention of the spread of tuberculous infection and the fortification of the largest possible fraction of the population by hygienic and immunologic measures has been and still is our goal.

No civilized population group can afford

*Read before the Medical Association of Georgia, Atlanta, Ga., May 14, 1931.

to harbor a feeling of security from the devastating effects of this disease by reason of the racial blood in its veins or the climatic conditions of its environment. Calmette³ states that "no human race escapes tuberculosis. The influence of climate upon the greater or lesser frequency of infection shows itself, in spite of anything one may say or write on the subject, to be absolutely nil. Tuberculosis is as widespread and serious among the Esquimaux or Laplanders as among the negroes of the Congo or the Canaques of the Hebrides. If the latter are destroyed in relatively smaller numbers than are the Europeans it is due exclusively to their custom of living in fairly small groups or to the Nomad life of certain among them as a result of which massive infections and super-infections are avoided." Moreover, not only the health and life of the tuberculous are in great jeopardy, but by reason of the communicability of his infection, he is very probably subjecting those of the same household and many residents of the same community to serious danger.

It savors of inhumanity to state, nevertheless it is probably true, that there are many victims of tuberculosis whose lives are not economically worth salvaging; but where among men will we find that wise and infallible jurist who can be trusted to discriminate between the fit and the unfit of human values?

In the development and promotion of our control programs it was assumed:

(1) That tuberculosis in its early stages is a relatively curable disease, and that sanatorium care, although desirable, is by no means essential, particularly if the patient has at his disposal the advantages offered by a reasonably good home.

(2) That early diagnosis is of fundamental importance, that the facilities essential in the discovery of minimal tuberculous pathology are not readily available to the entire medical profession, and that the existing diagnostic aids must be liberally supplemented if victims of this disease are to receive treatment which will promise favorable prognosis.

(3) That the people, as a whole, are in possession of insufficient knowledge of the early symptoms of the disease to lead them

to promptly seek medical advice and aid, and that a case finding service operated at public expense is of prime importance.

(4) That only physicians are competent to diagnose diseases and prescribe medical measures for their treatment.

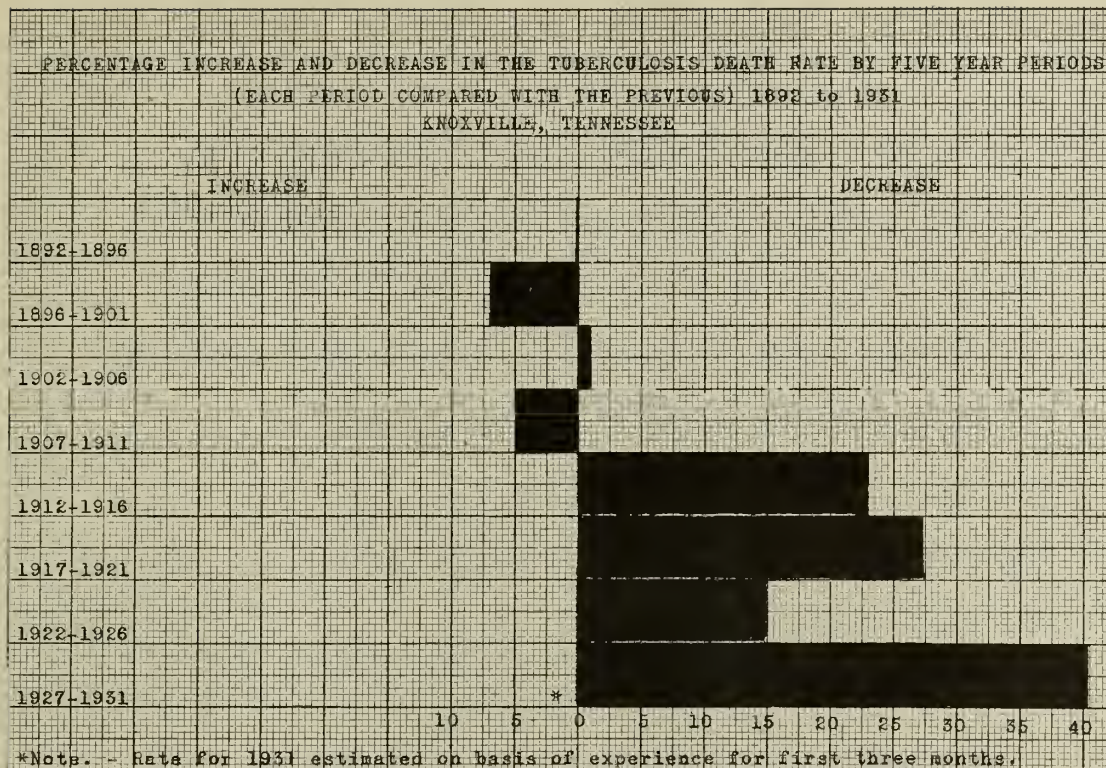
(5) That, generally speaking, a tuberculous individual is in need of constant follow-up instruction and nursing care in order to elicit and retain the active co-operation of patient and family, and that this particular type of service can be most effectively rendered by a trained and ethical nurse working in strict accord with and under specific directions of the physician in charge.

(6) That sanatorium facilities are quite limited, institutional care beyond the economic reach of the major portion of the victims of tuberculosis, and that if discovered early and placed immediately under the care of ethical general practitioners, the end results will be much more pleasing than should they reach the trained tuberculologist or adequately equipped sanatorium several months or possibly years later.

(7) That tuberculosis is, at least within reasonable limits, a preventable disease; that it is sensitive to sound hygienic, sanitary and immunologic measures when applied by medical and nurse personnel trained and experienced in the fundamentals of these sciences, and that their potentiality in the control of tuberculosis is probably no less than in the prevention of small pox, typhoid fever and diphtheria.

(8) That the treatment and the prevention of tuberculosis is the joint function of private practitioners and public health agencies, that curative measures are to be administered by graduate licensed physicians, and that the technic of case discovery, placement and follow-up can usually be more effectively accomplished through the efforts of trained public health personnel.

(9) That public health agencies, properly organized and adequately financed, should locate as many of the early cases of tuberculosis as possible and offer every facility at their command for arriving at a correct diagnosis, that a transcript of the clinic records should be immediately placed in the hands of the physicians of the patient's own choos-



ing, that none of the findings should be revealed to the patients except by their own doctors, and that the public health workers, so far as possible, should encourage each patient to promptly place himself under the care of the physician selected and diligently co-operate with him in the application of the treatment prescribed.

Therefore, the program to which reference is made consists of:

(1) Case finding through pre-clinic organization and clinic operation.

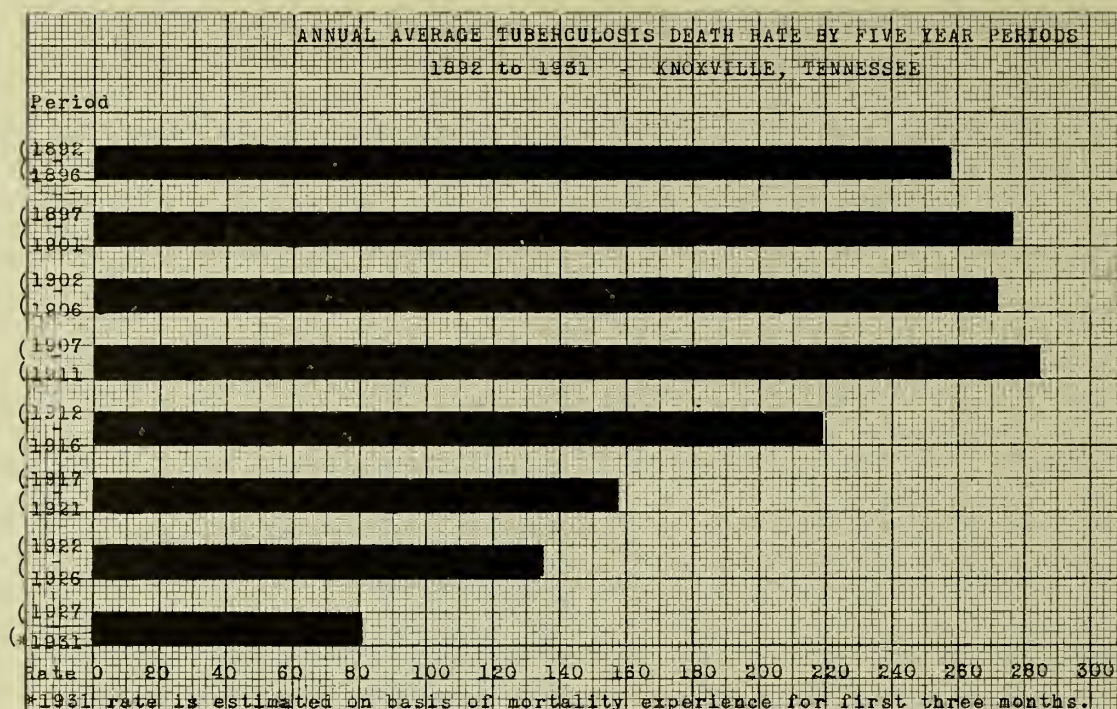
(2) Case treatment by private practitioner.

(3) Case follow-up by trained nurse personnel.

(4) Prophylaxis, to be administered by private practitioners and public health operators.

(1) *Case Finding:* The Georgia State Board of Health and local health organizations attempt to promote this program only in communities where its details are made familiar to the major number of the local physicians, usually through the County Medical Society. Since this body might, by ethical reasoning, be considered autonomous in its respective area in matters pertaining to

public medicine, an invitation from this group to the state and local health agencies to participate in this activity is usually considered to be a pre-requisite. On receipt of this invitation the health workers, with the aid of the physicians, visit and invite to the clinic to be held on a date and at a place already determined, principally tuberculosis contacts. Recent records of morbidity and mortality furnish the safest leads to potential contacts. It is reasonable to expect that those living from day to day in the same quarters with and using the same eating and drinking utensils as an active tuberculous person would have abundant opportunity for becoming infected with frequent and massive doses of virulent tubercle bacilli. By reason of results of this intimate exposure, peoples of earlier periods recognized "consumption" as a family disease, and thought it due to hereditary influences. Probably as much as ninety per cent of our tuberculosis problem will be found in approximately ten per cent of the families where active cases have existed during the past few years. Therefore, accurate registration of tuberculosis morbidity and mortality is essential to simplification and expedition of our program.



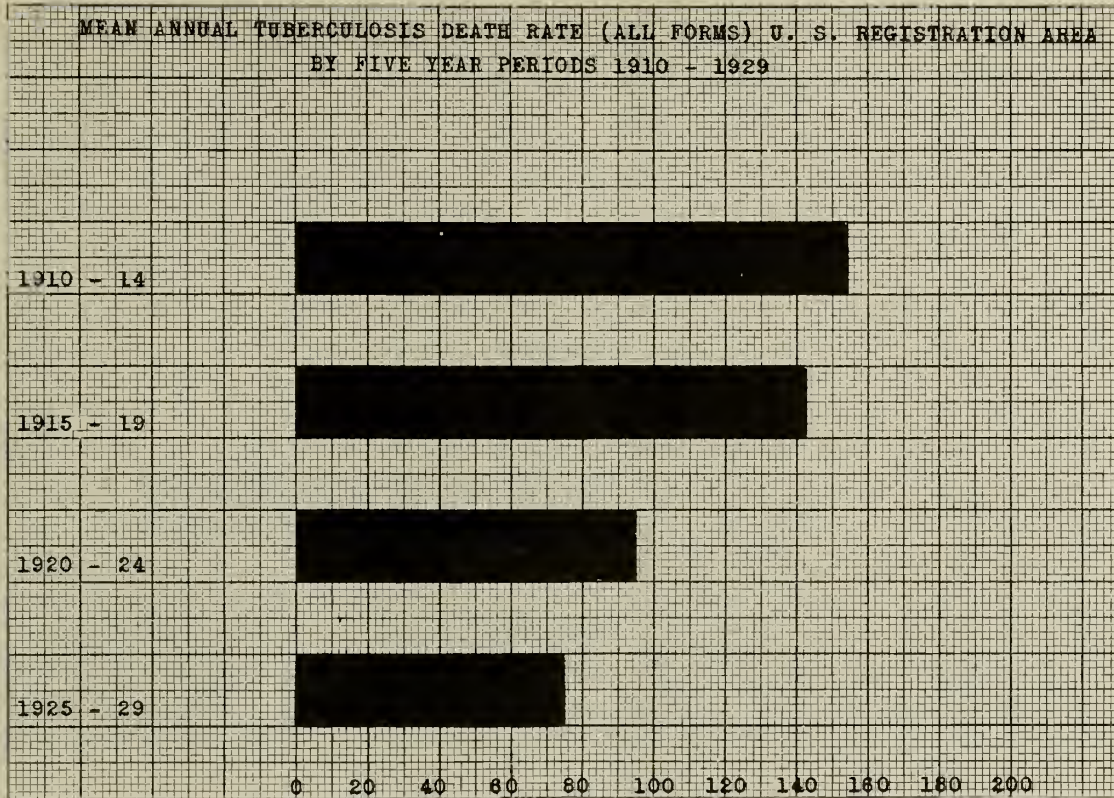
Moreover, we endeavor to impress the public that these clinics are not being conducted merely for the purpose of offering a free examination to all who desire a "bargain," but that they have for their aims the discovery of as nearly all the cases of early tuberculosis as possible, and that only those who have reason to believe they may be victims of the "Great White Plague" are expected to respond. By this method the prospective patients are sufficiently screened as to give us a relatively high, 19.1 per cent positive and 17 per cent "suspicious" cases.

At present there is only one complete clinic unit, consisting of a trained clinician, a nurse, an x-ray technician and a mobile x-ray laboratory in the field. These facilities and personnel are for the aid of the local physicians in attempting to arrive at a correct diagnosis as early as possible in each case. The patient is requested to choose a physician under whose care he expects to place himself in the event treatment is indicated. To this physician a transcript of the clinic records is promptly forwarded. Under no circumstances are any of the findings made known directly to the patient. He is urged by the clinic personnel to report to the physician whom he has chosen within three days, even though the findings be "negative."

With adult patients the routine is as follows: A careful history, thorough physical examination, and x-ray when indicated. Children are handled differently: first, a history is taken, then 0.1 mgm. O. T. is given (first dose) intradermally (Mantoux) with reaction observation forty-eight hours later. Those with positive reactions are then x-rayed. As far as possible, children with positive Mantoux tests and whose roentgenograms indicate pathology (usually tracheobronchial) are given a physical examination.

A word should be said in regard to the fundamental importance of finding tuberculous pathology early in children. (a) Because of the pleasing response elicited through the application of logical, but simple, measures of treatment, particularly among white children, and (b) according to Norris and Landis,³ "The disease is most fatal in infancy, the heaviest death rate being between six months and two years of age. The disease as it occurs in the adult is rarely encountered in this period. Between the age of five and fifteen years chronic tuberculosis is unusual."

It is realized, of course, that identification of childhood tuberculosis is not always easy; at the same time diligent effort in this field is liberally rewarded.



(2) *Treatment* is not within the province of the health department personnel. It is distinctly a function of private practitioners of medicine. Early cases who co-operate with their family physicians can no doubt expect better results than can those suffering from pneumonia or typhoid fever. Whoever conceived the idea that those physicians who are engaged in the general practice of medicine are not competent to administer to the tuberculous was unquestionably the victim of some type of psychosis. The results of his efforts will not be so vastly different from that usually experienced by the Sanatorium and the tuberculologist. Each must have three essentials in order to serve adequately the welfare of the patient:

- (a) An early diagnosis.
- (b) A co-operative patient, and
- (c) A balanced diet and adequate rest facilities at his command. Other measures, of course, are of much value—heliotherapeutic apparatus and surgical measures in certain types, particularly where there is only unilateral involvement.

Of course there are many cases where the necessary food and facilities for rest, as well

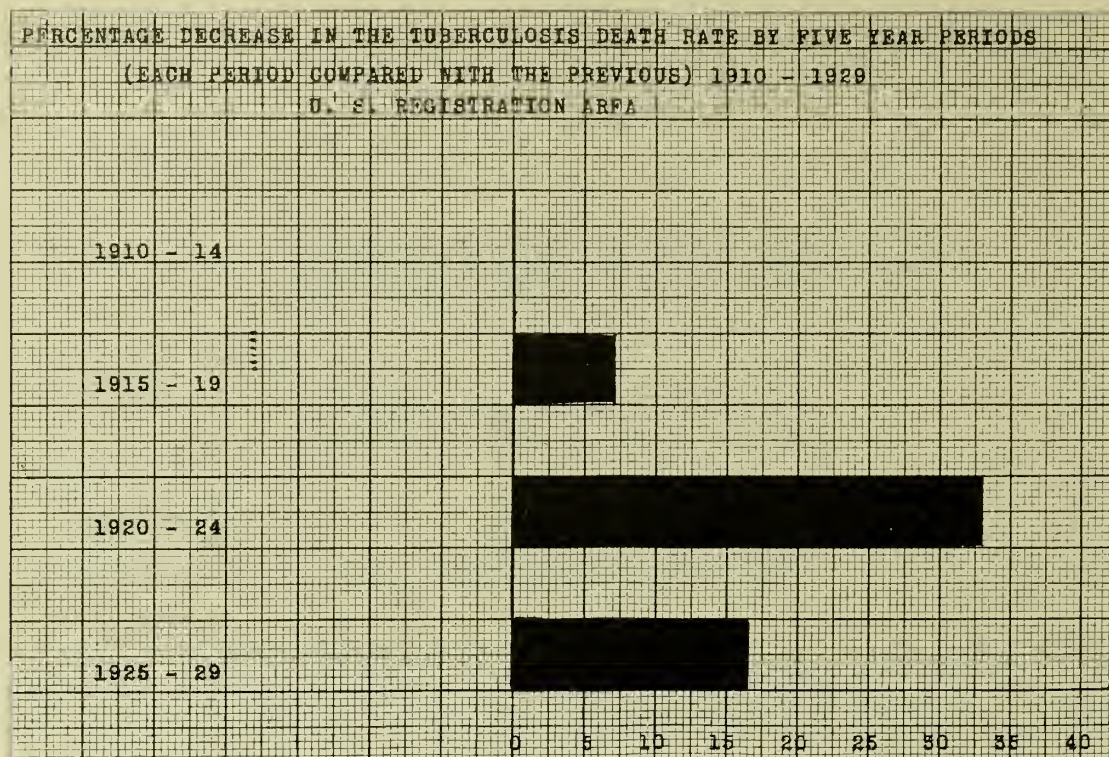
as other valuable aids to treatment, are not available. The care of these is unquestionably the function and the first duty of sanatoria operated at public expense. In these institutions the results possible will, in a very large measure, be proportionate to the earliness of diagnosis and the promptness with which treatment is applied.

(3) *Case Follow-Up Service* by a competent nurse in accordance with instructions of the physician-in-charge is of fundamental importance in converting the patient's environment into the nearest possible approach to that of a sanatorium. In general terms the objectives of her visits are:

(a) To encourage the patient and family to co-operate actively with the physician in every particular.

(b) To teach household hygiene, dietetics and personal sanitation so as to fortify the patient and other members of the family against the existing infection, and to prevent its further spread.

(c) To keep the physician informed as to the progress being made, necessitating his making a minimal number of professional visits to the home, and enabling him to



administer a much more effective type of treatment.

(4) *Prophylaxis*, not only by means of hygienic and sanitary measures, but possibly through protective inoculation with *Bacillus Calmette-Guerin* (B.C.G.) which seems to promise great hope. Professor Cattaneo⁴ is advocating the liberal use of this preventive and points out that, should we attempt to control childhood tuberculosis by means of preventoria, "it would be necessary to build entire cities for the tuberculous." The writer has been told by Professor Casparis that in his opinion the administration of this measure to children (particularly contacts) will, within a relatively short period of time, take its place along with typhoid and smallpox vaccines and toxin-antitoxin (or toxoid).

That the health workers may be able to readily locate foci of infection, it is essential that physicians promptly register not only deaths from, but cases of, tuberculosis with the health authorities in accordance with legal requirements.

The beginning of a program of this particular character was made in Tennessee late in 1927. From November 14, 1927, through June 30, 1929,⁵ "11,566 carefully selected

persons were examined. Of these, 2,827 or 24.4 per cent were diagnosed as positive, 2,573 or 22.3 per cent suspicious and 6,166 or 53.3 per cent negative. Physicians asked for follow-up service on 94 per cent of "positive and suspicious" cases. Physicians have expressed themselves almost unanimously as favoring the continuance and extension of this work as a logical approach to the tuberculosis problem."

The writer in 1928⁶ stated that, of the physicians practicing in areas where clinics had been conducted and who on request expressed their attitude toward the program, 80.6 per cent were favorable.

During the eleven year period preceding the establishment of this plan in Tennessee the tuberculosis mortality was declining at the rate of approximately 3 per cent per year. Since 1927 the rate of decline has almost doubled.

In the City of Knoxville, where the work under this plan received special emphasis, the results are seemingly most encouraging as is quite evident from the following statistics of the tuberculosis mortality.

MAP SHOWING COUNTIES IN WHICH TUBERCULOSIS CLINICS HAVE BEEN HELD
BEGINNING OCTOBER 13, 1930 - APRIL 30, 1931 (INC.)

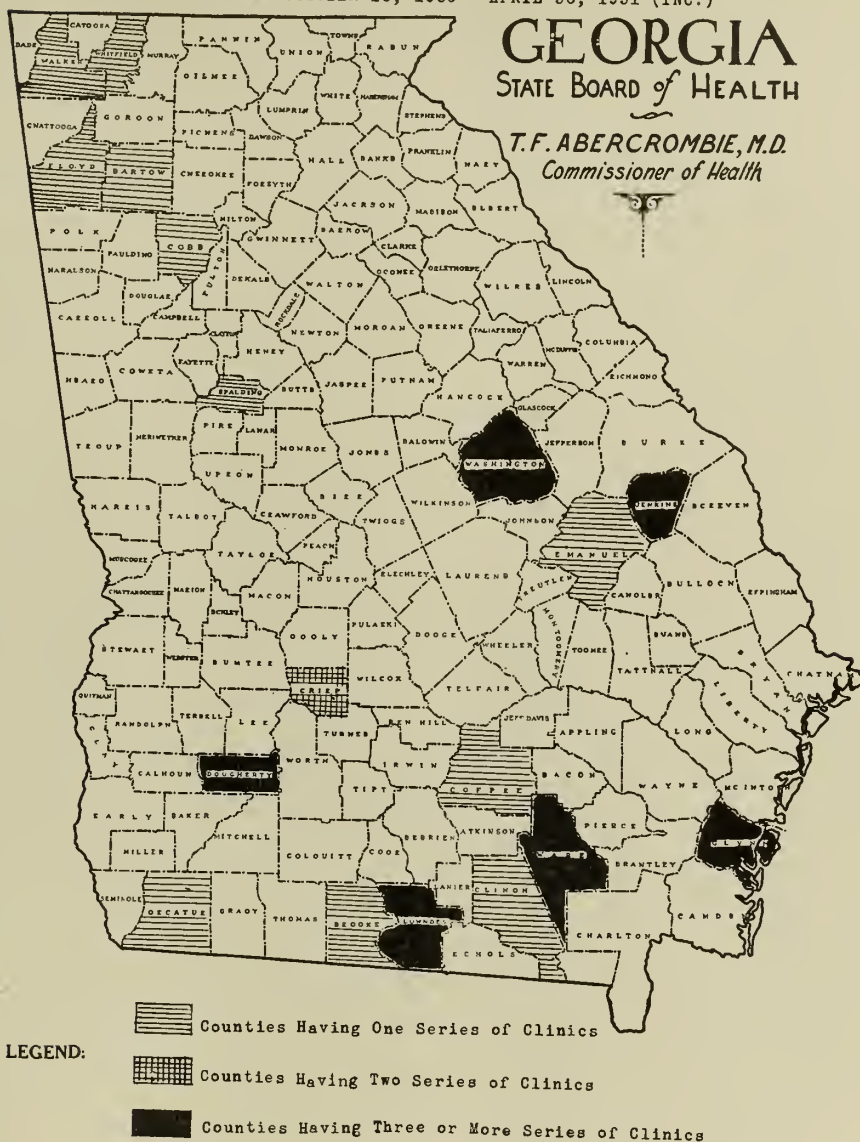


TABLE 1

Tuberculosis Death Rate

Annual Average by Five-Year Periods—1892-1931

Knoxville, Tenn.

Rate Annual As compared with the
Average previous period percentage

Period		Increase	Decrease
1892-1896	257.4	—	—
1897-1901	276.4	6.8	—
1902-1906	270.9	—	2.0
1907-1911	284.5	4.8	—
1912-1916	219.2	—	23.0
1917-1921	158.5	—	27.7
1922-1926	135.6	—	14.4
*1927-1931	81.0	—	40.2

*Note: The 1931 death rate is estimated on the basis of the experience of the first three months, which is usually slightly higher than the average for the other three quarters.

Table Number 2 shows the mean annual tuberculosis death rates (all forms) by five-year periods from 1910 through 1929 and percentage reduction in each period as compared with the previous five years.

TABLE 2

Mean Annual Tuberculosis Death Rate (all forms) U. S. Reg. Area by Five-Year Periods 1910-1929 and Percentage Decrease in each Period as Compared with the Previous Period.

Period	Rate	Pct. in Rate Decrease
1910-14	154.1	—
1915-19	142.7	7.4
1920-24	94.5	33.8
1925-29	77.8	17.7

In 1920 the tuberculosis death rate (all forms) in Georgia was 81.5 per cent, and in 1930 it was 74.6 per cent, or an average

reduction of only 0.7 per cent per year. For the white the average was one per cent per year, but for the colored there was an increase of approximately 0.3 per cent per year. Moreover, the average annual reduction in tuberculosis mortality throughout the U. S. Registration area from 1910 through 1929 was approximately 2.6 per cent. It therefore appears that during the years 1928, 1929 and 1930 some factor or factors favorable to the reduction of tuberculosis mortality effected the death rate in Tennessee as a whole and particularly in the City of Knoxville; and that these same factors were not in operation, at least to the same extent, in Georgia or in the U. S. Registration area as a whole.

On October 13th, 1930, the Georgia State Board of Health with the aid of the Georgia Tuberculosis Association launched a program of similar character, and from that date through April 30th, 1931, examined 1,591 patients, with a resultant 304 positive, 251 suspicious and 1,036 negative cases. Re-examinations number 192, making a grand total of 1,783 examinations and re-examinations.

At present there is only one clinic unit in the field. To serve each rural and semi-rural county in the state once each quarter three units will be required. Moreover, when work is to be attempted in counties not having whole time health service three additional nurses will be needed for each unit in order that adequate, or nearly adequate, pre-clinic organization and case follow-up may be had. Operation of these units will cost approximately \$75,000 per year.

Summary

(1) The problem of tuberculosis can be solved, if at all, only through the coordinated efforts of public health agencies and private practitioners of medicine.

(2) Sanatorium facilities are, and probably always will be, totally inadequate in Georgia for the care and treatment of all of the victims of the disease.

(3) Effective home treatment can be made available, provided early cases of the disease are found and placed in the hands of local physicians, and are "followed up" for them in strict accordance with their instructions.

(4) The results of any scheme of treatment of cases of tuberculosis are in a large measure proportional to the earliness of diagnosis and the co-operation of the patient with his physician.

(5) The prevention of tuberculosis is seemingly not so difficult as heretofore considered. The principles of hygiene, sanitation and immunology can be applied in the control of tuberculosis and promise results that are comparable to those obtained in the prevention of typhoid fever, diphtheria and other communicable infections.

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DISCUSSION ON PAPER OF DOCTOR HAYGOOD

Dr. Champ H. Holmes, Atlanta, Ga.—While it is true that the mortality rate for tuberculosis is falling, and has done so almost annually for the past thirty years, and while it is also true that its place has been taken by cardiac disease and perhaps cancer, the great white plague is still with us, and has to be reckoned with. It is the most fatal and most destructive disease during the most productive period of the lives of men and women. It most often appears in adolescence and early adult life, between the ages of 15 and 28, and over two-thirds of the deaths occur between the ages of 15 and 45. We have made advances with surgery and collapse therapy, but there is still one outstanding thing in the control and prevention of tuberculosis; namely, education. One of its strongest links is the general practitioner, as has been shown in the admirable paper by Doctor Haygood. Education needs to be taken beyond the patient with tuberculosis, to his contacts and friends, and this can best be done by the private practitioner. Too many individuals are still prone to live in the dark days of tuberculosis and are not familiar with the progress that has been made. There is a slogan to the effect that we do not die from tuberculosis but from ignorance of it. Our big problem is not so much to learn about the diagnosis and treatment of tuberculosis as it is to disseminate among physicians and laity what we already know. Tuberculosis is probably the most easily curable of all the chronic diseases that produce death. Not so long ago to make a diagnosis of tuberculosis meant death. Today it should mean life. An agency was required to spread the gospel of the modern concept of tuberculosis and to organize the machinery throughout the country for combating the disease. This agency, the

National Tuberculosis Association, came into being in 1904. The death rate at that time was 200 which is over twice the present death rate of seventy-nine and a fraction to 100,000 population. The National Tuberculosis Association has lent its help in training nurses and doctors and in distributing information to the public. It lays great stress on searching out the contacts, and on the early diagnosis and treatment as the best means of combating this disease.

This association has been able to carry on this momentous work with the aid of the numerous allied agencies, the state, county, and municipal organizations throughout the country. A specific program of one of these and one which promises to produce far-reaching results has been outlined in Doctor Haygood's excellent paper.

Dr. Hal M. Davison, Atlanta, Ga.—From the result of the knowledge gained in the care of tuberculous patients, there is no doubt that at present the hope for the control of tuberculosis lies entirely in early diagnosis, adequate treatment, and in the segregation of those cases responsible for spreading the disease. There is no doubt, also, that facilities offered by the state for the care of these cases are thoroughly inadequate.

We believe that a careful analysis of Doctor Haygood's paper will convince any physician that the program he outlines offers the best solution for our present conditions. We hope that the writer is wrong in his prognosis of the future, and that at some not too distant day mismanagement and graft can be partially eliminated from our governments, sufficiently to give us more money for public health purposes. We hope, also, to see the national government in a position to establish a Commissioner of Health in the Cabinet, and to assist the states in the care of all preventable and communicable diseases.

We anticipate the eventual abolition of wars with radical reduction of our army and navy, thereby liberating the huge proportion of the national income now spent for defense against human enemies, to be used for national offense against the enemies that are always present, that is, disease in its various forms.

The speaker has outlined every detail that is necessary to make his program a success. We wish to mention some of these again as a matter of emphasis:

1. It is necessary for medical schools and hospitals to train our physicians in the types of infantile and adult tuberculosis, so that they may not overlook any indications of this disease.

2. Physicians must exercise great care in reporting the occurrence of all cases of tuberculosis, so that the examination of all contacts can be thoroughly accomplished. If co-operation upon this particular point is not afforded, the whole scheme is nullified. We think that not only one examination of such contacts should be made, but that the examination should be repeated at intervals to be established by experience.

3. After examination, the follow-up service by adequately trained nurses who will co-operate with local physicians is absolutely necessary. We have found

that people come to doctors for examination through only two causes, either pain or fear. If neither of these agents exists, it will be exceedingly difficult to get the co-operation of persons possibly infected with tuberculosis, and even of those proven to be so infected. It is very hard to convince people who do not feel ill and who have no pain that they must take care to prevent illness in themselves and in others.

In addition to the above requirements, it is necessary that physicians lay aside the so-called "professional dignity" that has been ingrained in our profession for so many decades, and that they assist the nurses by keeping in constant communication with these cases, even though the patients do not co-operate.

We believe that physicians should watch every case of bronchitis, every case of measles, every case of whooping cough, and every case that is at all suspicious of any lung involvement, until all signs have completely disappeared. We are seeing people quite often who have had attacks of pleurisy with effusion, who have neglected themselves and whom physicians have allowed to be neglected, until they have eventually developed far-advanced pulmonary tuberculosis. We cannot educate the people until we educate ourselves.

Furthermore, let us say that state medicine in one form or another has been and is with us, and must of a necessity increase its service in the future. This should be recognized, accepted by physicians individually and as an organization, should be assisted in every way possible and guided into the proper channels for the best interest of the public. No small part of this must be the furnishing of adequate facilities for the care of all cases of tuberculosis.

Dr. J. W. Simmons, Brunswick, Ga.—The only reason I wish to discuss this paper is because one of the counties shown was my own county. I am sorry the paper was not read before a larger audience, so that the information could be taken back to many home counties. This is one thing in connection with public health with which we have no quarrel. We are like the wife who searched her husband's pockets and turned on him screaming, "You embezzler! You have been holding out on me." He said, "Why, my dear, what's the matter? Don't I always bring you my pay check on the first of every month?" She replied, "Yes, you do, but you never told me you had a pay day on the fifteenth as well as on the first."

The State Department of Health has been holding out on some of the work they have been doing. I wish to state that my experience with the clinics which have been held in my county has impressed me with the painstaking care and the absolute ethics they have carried out. I have had patients return to me that I have not had on my books for years, because they have reestablished the contact for me. I have had reports sent to me that any clinic, even the Mayo Clinic, would be proud of, in their search for a history of contacts and for allied diseases. This has given me an opportunity to serve my community better. It has made me more conscientious in following up cases that I have neglected. It has renewed in me the feel-

ing of responsibility in the care of these patients that I had formerly shirked. It has brought to me a realization of this fact,—that if this work is conducted as it has been begun, and I pray the good Lord it may be, within a short period of time we will experience a marvelous change in the tuberculous conditions we find around us.

When they first came through and asked the doctors if we wanted this work done, most of us said, "We have not tuberculosis enough down here to fool with." If I see an active case of tuberculosis once every three or four months I think it is something marvelous. We do not recognize it, but since this clinic has come through with its equipment that Doctor Haygood described to you, with its histories and its records of contacts that have been established, of its morbidity and mortality, there has been a change. They have found records of contacts that the doctors in that community never knew existed, or had entirely forgotten. I have histories of contacts several years back, now. Their children are being examined, their brothers and sisters are going there, and we have report after report of suspicious cases, of fibrous, suspicious areas around the hilus, and this puts the physician on his guard to follow-up the cases. Then comes this organization of which Doctor Haygood has spoken, in the follow-up of cases, keeping up the contact.

If every physician in the State of Georgia could realize what this is doing they would rise up, individually and en masse, and demand of the State that it continue increasing its work, enhancing its usefulness, and extending this most magnificent work that Doctor Haygood under the State Board of Health in Georgia has undertaken. I am happy to make this acknowledgment, happy to state to you that my reaction toward it is one altogether of co-operation, one altogether of praise and well-wishing for it. I wish Doctor Haygood could go into every county and do what he has done in my County of Glynn, and he can do this if you will each one help him in this worthy enterprise.

Dr. M. F. Haygood, Alto, Ga. (closing). I am most appreciative of the discussions and highly compliments which my paper provoked. I wish only to say that if we can establish three such units as I have described, which will cost about \$75,000 per annum, I think that within the next ten years we can certainly reduce tuberculosis by 50 per cent. When we remember that the funerals of those dying from tuberculosis cost this State half a million dollars each year, and also that we can conduct this field service at a cost far less than this sum annually, the work should enlist the active co-operation of the entire medical profession of Georgia.

S. William Becker and Earl B. Ritchie, Chicago (Jour. A. M. A., August 8, 1931), report two cases of argyria following over-treatment by silver arsphenamine. The clinical diagnosis was substantiated by histologic examination, including histochemical studies. Attention is called to the fact that the administration of 15 Gm. or more of silver arsphenamine is apt to be followed by argyria.

THE RICHMOND COUNTY MEDICAL SOCIETY

History

J. M. HULL, M.D.

Augusta

The history of the Richmond County Medical Society is the story of many important early medical activities in the State of Georgia, and since its minutes prior to 1905 are lost, the writer must construct its early history from the files of the Southern Medical and Surgical Journal, whose first editors were Dr. Milton Antony and Dr. Joseph A. Eve, and after the death of Doctor Antony, Dr. Paul F. Eve and Dr. I. P. Garvin; from the papers and addresses of Dr. DeSaussure Ford and from The History of the Medical Department of the University of Georgia, by Dr. W. H. Goodrich.

The foresight of the few men who organized this society was nothing short of marvelous and was characterized by infinite wisdom, courage and energy.

As the demands of the rapidly changing times arose, they expanded their activities and broadened their scope by creating institutions to meet these demands and placing each in the position to best accomplish its respective purpose.

Its existence dates from 1808, though its first notable activities started with its incorporation by the General Assembly of the State, November 27th, 1822, under the name of the Medical Society of Augusta, Ga. About this time Georgia was overrun by an army of quacks of every cult and to meet this situation this society succeeded in getting the General Assembly on December 24th, 1825 to pass a bill creating a Board of State Medical Examiners, to examine and license all doctors and druggists. So well did this board do its work that in two years it is said to have rid the state of all undesirable and incompetent men in both professions.

Again in December, 1828, we find the members of this Society obtaining from the State's General Assembly an act to establish and incorporate the Medical Academy of Georgia. Under the terms of this act, in 1829, the Board of Trustees of the Academy was organized, who at a meeting held the second of March, 1829, decided that three professors were sufficient for the present and elected Dr. Lewis D. Ford, Professor of Materia Medica, Chemistry and Pharmacy; Dr. Milton Antony, Professor of Institutes and Practice of Medicine and Midwifery, and Diseases of Women and Children; and Dr.

Wm. R. Waring, Professor of Anatomy and Surgery. Dr. Lewis D. Ford was elected its dean.

A short time later the Academy became the Medical Institute of the State of Georgia; still later to become the Medical College of Georgia; and now the Medical Department of the University of Georgia.

The influence and activities of the Society in bringing about the creation and organization of the Academy was undoubtedly its greatest single accomplishment, and as thereby its chief objective was attained, from then on the Society as such, settled down to the routine of a Medical Society.

But just as the dreams and ambitions of a mother are often realized in the work and accomplishments of a child, so the objectives of the society found in the work of its sons. The Academy of Medicine, three noteworthy achievements; the creation and publication of the Southern Medical and Surgical Journal, in whose pages its works has been preserved; the organization of the Medical Association of Georgia; and the movement that resulted in the birth of The American Medical Association. The authority for these last two statements is found first in the inaugural address of Dr. DeSaussure Ford, President of the State Association, delivered in Savannah in 1875. He says: "In 1849 in response to a call emanating from the Medical College of Georgia at Augusta, the representative medical intelligentsia of the State met in Savannah to organize the Medical Association of Georgia, and there it was born. Eighty men, the best in the state, answered the call and Dr. Lewis D. Ford was elected its first President."

The last and its greatest achievement is found in the Encyclopedia Americana, in which Dr. James J. Walsh says: "That the origin of the American Medical Association was the result of a letter by Doctor Antony to the deans of all the Medical Colleges of the United States for the purpose of regulating medical education and improving the professional status of the American physicians."

The next obtainable record of its unbroken activities comes in the following from the Southern Medical and Surgical Journal: "Medical Society of Augusta, 9th November, 1836. The Society convened at 7 p.m. Doctor Bowen, the essayist for the evening, not having his essay present, the members were called on for the medical intelligence. Whereon, Doctor Antony related a case of typhoid fever, in which salivation had supervened on the use of forty grains of calomel, in 8 grain doses, three hours apart, with 1 grain aloes each."

It would appear that the meetings of the

Society were suspended during the period of the War, for we find the following statement regarding its reorganization, in the Southern Medical and Surgical Journal: "The Medical Society of Augusta was reviewed and reorganized on the 23rd of May, 1866. The officers of the Society, as at present constituted, are: President, L. A. Dugas, M.D., Professor of Surgery in the Medical College of Georgia; Vice-President, S. E. Habersham, M.D.; Secretary, V. G. Hitt, M.D."

Whether at that meeting or one held a little later, the name of the society was changed to the Richmond County Medical Society, the writer can find no record, but that it was between 1866 and 1874 is shown in two papers of, and by, Dr. DeSaussure Ford, both marked, read before the Richmond County Medical Society, one in November, 1875, on "The Value of Tar Water as a Dressing in Surgical Cases," and the other in May, 1876, on "The Germ Therapy of Diseases."

From 1877 to July, 1879, the writer can recall many of the meetings held in the library of the old college building and always well attended. It was at one of these meetings that Dr. Robert Campbell's explanation of the action of quinine was first given and his dictum pronounced that quinine should be used in this section in all illnesses, internally, externally and eternally. It was likewise here that Dr. Henry F. Campbell first demonstrated by diagrams his knee-breast position for the relief of uterine displacement and exhibited his glass pessary.

Doctor Campbell a few years later was elected to the Presidency of the American Medical Association, and was perhaps the first man from the Southern States thus honored.

It was about 1886 that the flagging interest in the society was decidedly stirred by a paper by Dr. Theodore Lamb on consumption and its infectiousness, not then generally accepted, which stimulated the members to an intensive study of the disease to the great advantage of many sufferers. By the irony of fate, Doctor Lamb later contracted this disease and died therefrom.

It was probably two years later that Dr. W. Z. Holliday, in a paper first, and then a series of reports of cases, brought forcefully to the attention of the society the Diseases of Children. He was without doubt the first to establish Pediatrics as a separate branch in this section of the world.

Again in 1895 or 1896, interest in the meeting of the Association was aroused by a paper on typhoid fever by Dr. Thomas D. Coleman. This paper represented a truly

(Continued on Page 456)

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA
Devoted to Welfare of Medical Association of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

NOVEMBER, 1931

THE DOCTOR AS A BUSINESS MAN

Should the doctor know anything about business, or does it suffice to be simply a community humanitarian? Is a physician better fitted for service when he is careless and indifferent about the business side of his profession? Does it lower the standard of the profession for a doctor to run his business on the same high standards as the systematic business man? Is it commercializing his profession for a physician to study and practice business methods?

The old idea, with many of the profession as well as a great majority of the laity, that physicians who knew least about business generally, knew most about medicine has long been exploded as a very erroneous conception of the truth. Many of the old school were led to believe that no physician who gave any consideration to the financial side of his work could be imbued with the necessary sympathy, skill and interest in his case as the man who obeyed every command of his clientele and said nothing about the doctor's pay or his pay day.

I have in mind a number of excellent physicians who have gone to their reward, yet they had so much evaded the business side of their profession that when the last call was made they had not actually accumulated sufficient wealth to feed and clothe their dependents for one year. Some of these men did not keep an account book for what was done. The whole thing was trusted to the honor and integrity of the man to whom the service was rendered. A prominent business man told me some years ago that he called on his physician for a statement of his account to which the doctor replied, "I am a doctor, not a book-keeper". The physician finally fumbled in his pockets and found several memorandums for service to this man's family on old envelopes; but, according to the business man he did not have one-

fourth of the items. This doctor was one of the outstanding in his community and was loved by every one old and young, yet he had made no provision for dependents or the day he might be living and unable to work, regardless of the fact that he had completely broken his health and shortened his life by untiring service in the community.

Such rules as have been practiced in business by doctors may have been all right many years ago when the old world was moving slower than today, but there must be a right-about-face in business methods by the physician if he expects to hold even the respect of his community, to say nothing of dependents and non-producing days. The rank and file of the public look at matters pertaining to the physician much different than in former days. The great majority of men and women want to pay for medical practice with the same business methods as they pay the grocer, dry-goods store, rent or any other legitimate expense. They look upon any doctor who is careless in business as being equally careless in professional duties. I have known quite a few people to quit their family physician and select another, not because they had more con-

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contridution in some other medical periodical to submit an abstract of the article for these columns.

fidence in the ability of the second man, but because with the first doctor they could never get a statement. When an account was paid, the physician failed to credit same and they never knew just what the books showed. Finally, they had a little talk in the family home and came to the conclusion that if their doctor was so careless about the business side of his profession, perhaps he might be equally as indifferent about his patients. They then concluded to select another doctor who was also a good business man.

There is no man in any community who necessarily renders more free service than the doctor. He has, by his methods, trained a lot of them to expect it. But when a drive is made for funds to take care of charity, the local physician is usually one of the first

to be solicited. The committee attempts to explain to him the great need in the community, forgetting the fact that the doctor knows such conditions by actual experience better than any other person.

The place where this work of training should begin is in our medical schools with a lecture by a physician weekly who has been able to correlate business and professional duties. When I graduated in 1902 nothing was ever said about the physician's financial responsibility in his community, and it took me a long time to learn that I could still be a doctor and carry on my profession in such a business-like manner that I could be able to meet my obligations and not be tongue-lashed in the community as a doctor who could not pay his bill—a severe blow to any practicing physician. I mentioned this matter to my good friend, Dr. Stewart Roberts, at our last State meeting and he readily agreed with me that business methods should be taught to medical students during the junior or senior year, and furthermore stated that he was handling that matter at the Emory University School of Medicine. Doctor Roberts knows how to do that in a systematic way, therefore the young doctors of tomorrow who graduate at this school should be better prepared to protect their reputation in a community than many of us who had no such teaching.

The average medical society seems to be afraid to discuss business methods at a meeting. Some seem to think that it is lowering the standard of the profession and putting the healing art on a low plane to even mention the business side of the practice of medicine. Some make the remark that such a discussion tends to commercialize the profession and destroy the high ideals of the healing art. When a doctor fails to meet his financial obligations, his standard is lowered in the estimation of friend and foe, and then after he has served his community with and without remuneration for forty or fifty years and made no provision for the declining years when he is unable to do an extensive practice, perhaps some of his old friends may be willing to help him secure lodging in the county home for the balance of his days. Every physician owes it to himself, his family, his

profession and his community respect to so conduct his profession from a business standpoint that he will never give an opportunity to be tongue-lashed by the community as one who does not meet his obligations.

M. M. McCORD, M.D.

EXTENSION COURSE

The extension course for the physicians of Georgia, put on by the University of Georgia and Emory, was held in six sections of the State. The number of attendants at each course was as follows: Athens, 76; Waycross, 37; Swainsboro, 45; Albany, 60; Macon, 31, and Rome, 66, making a total of 315 physicians attending.

The alumni and venereal disease clinic week was attended by 199 physicians. This gave us a total of 514.

Through the co-operation of Emory University and the Julius Rosenwald Fund a five-day course of instruction was put on for the negro physicians. The enrollment was fifty-three, fifty being in attendance for each of the five days.

This makes a grand total of 567 physicians who have attended classes by the professors of the University of Georgia and Emory.

In all of these courses the State Board of Health had charge of the detail and publicity work.

Prof. J. R. McCord, of Emory University, did a great deal to make the courses a success, giving much time to the details of the program. The same is true of the service rendered by J. C. Wardlaw, of the University of Georgia.

The physicians in each of the courses have been so pleased that they are requesting that the same course be repeated next year.

JOE P. BOWDOIN, M.D.,

Deputy Commissioner of Health.

WELCOME TO ALABAMA

Beginning with July, 1931, the Medical Association of the State of Alabama and the state board of health have cooperated in the issuing of a journal of the two organizations, this periodical to be owned and published jointly each month by these two agents. The periodical makes a right start by becoming a member of the Cooperative Medical Advertising Bureau, in which practically all of the state medical journals are associated. Such periodicals as are associated in the bureau limit their advertising of drugs to products passed on and accepted by the Council on Pharmacy and Chemistry of the American Medical Association. The first issue of the Journal of the Medical Association of the State of Alabama and of the State Board of Health

includes the president's address; two articles on scientific subjects; editorials; proceedings of the association, since the magazine replaces the previously published transactions; also a department of public health, of county society news, book abstracts and reviews. It is a well organized publication, apparently carefully edited, and it deserves therefore a special welcome as a useful addition to the group of state medical publications.

—J. A. M. A., Oct. 17, 1931.

CANCER*

Chapter VI

J. L. CAMPBELL,† M.D.
Atlanta

The majority of cancers occur in women. Indeed, during the past year more than 10,000 American women died of cancer of the breast. A large number of these could have been saved had it been recognized that early cancer of the breast is, as a rule, a *single painless lump*. Yet, a lump in the breast is not necessarily cancer. Age is a most important factor in diagnosis. Women under 25 years of age rarely have cancer of the breast; in fact, the ratio of malignant to benign lesions at this period of life is about 1 to 550. However, this ratio decreases until, at the age of 40 and over, every lump in the breast should be considered cancer until proven otherwise.

Every one who has a lump in the breast should see a doctor at once. Do not wait until it begins to give pain. If early cancer was as painful as toothache, nearly every one would be cured, for all seek relief for pain. Early cancer of the breast may be cured, but—remember—every week of delay lessens the chance of recovery.

When a woman has reached that tragic period known as "the change of life," she must bear in mind that cancer is likely to develop quite without her knowledge. This is particularly true if she is the mother of one or more children. The only safe rule is to have a medical adviser make a thorough examination at least twice a year. Many women believe that it is nothing but natural to be inconvenienced in certain ways during this period; but such is not the case! The advice of some wise old grandma who says, "It is nothing but the change of life; let it alone," has filled many an untimely grave and made more orphan children than all

wars engaged in by the United States since the Declaration of Independence. Surgery is no longer recognized as the best method of treatment for cancer that occurs during this time of life. It is to the everlasting glory of Madame Curie that her great discovery—radium—has blessed this period of woman's life with a means of curing cancer without resorting to surgery.

Cancer of the skin is responsible for about 3.5 percent of the total number of deaths from malignant disease. Early diagnosis is the best means of effecting a cure, as every skin cancer has a recognizable pre-cancer stage. A cancer on the upper part of the face usually begins as a slightly raised, rough spot which may be present for a long time before really becoming dangerous. During this time it may be cured by a light cautery or a medium dose of radium. Skin cancers in other locations are more serious because they spread to distant parts of the body where they cannot be reached. However, they may be cured if treated early.

A very malignant form of cancer, known as sarcoma, occurs in young people more often than in those of advanced life. It attacks the lymph glands, especially those of the neck, and spreads rapidly to other parts of the body. It yields to radiation from x-ray often enough to make us encourage this form of treatment in preference to surgery, which offers little or no hope of cure.

The bones are another favorite location for sarcoma; it even attacks the fascias and muscles. In the early stage it is a painless lump. So the best advice is: Consult a doctor at once whenever a lump is found!

In conclusion, remember that cancer does not cause pain in its early, curable stage. It is not known to be hereditary; so do not worry if a member of your family has died of it. There is scarcely a family in Georgia that has not had a cancer death. It is not due to bad blood. It is rarely, if ever, caused by a single bruise. Repeated mild traumas, however, cause it if the location is susceptible. Consult a doctor at once if there is any suspicious symptom. Do not submit to a radical operation without consultation. Treat your doctor fairly and ask him to let you have another physician see you with him.

The Eighty-Third Annual Session of the Medical Association of Georgia will be held at Savannah, May 17, 18, 19, 20, 1932.

The American Medical Association will hold its next annual session at New Orleans, May 9, 10, 11, 12, 13, 1932.

*This is the sixth of a series of seven articles on the cancer problem in its relation to public health written by Doctor Campbell at the request of the Georgia State Board of Health. Succeeding articles will be published in the Journal.

†Chairman of the Cancer Commission of the Association.

WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA OFFICERS

President.....Mrs. Ralston Lattimore, Savannah
President-Elect.....Mrs. S. T. R. Revell, Louisville
1st Vice-President.....Mrs. J. Bonar White, Atlanta
2nd Vice-President.....Mrs. C. B. Almand, Winder
3rd Vice-Pres., Mrs. D. N. Thompson, Elberton

Recording Secy.....Mrs. J. E. Penland, Waycross
Cor. Secretary.....Mrs. Wm. R. Dancy, Savannah
Treasurer.....Mrs. Ben Bashinski, Macon
Parliamentarian Mrs. Allen H. Bunce, Atlanta
Editor.....Mrs. G. H. Johnson, Savannah

MEDICAL AUXILIARY TO HONOR MEMBERS OF THE NURSES' ASSOCIATION

The Woman's Auxiliary to the Georgia Medical Society will entertain with a reception in honor of the nurses who attend the convention of the Georgia State Nurses Association which will meet in Savannah, October 26-27-28. The reception will be given Sunday afternoon, October 25th, 5 to 6 o'clock, at the Hotel DeSoto. Officers of the local Auxiliary, with many of the State officers, will receive the guests.

Plans for the reception were made at the first fall meeting held at the home of Mrs. E. N. Gleaton on the 16th. After the business meeting, refreshments were served by Mrs. Gleaton and Mrs. E. M. Baker, Jr., who were joint hostesses for the afternoon. The meeting was unusually well attended and much interest was shown in the plans for the winter.

The Auxiliary will give a card party on the afternoon and evening of November 13th at the Hotel Savannah. Proceeds from this entertainment will be used for the Students' Educational Loan Fund.

Mrs. O. W. Schwalb will entertain the members at the next meeting.

—Savannah Morning News.

Savannah, Ga., Oct. 17, 1931.

Fulton County

The Woman's Auxiliary to the Fulton County Medical Society met September 4th at the Academy of Medicine in Atlanta, Mrs. J. Bonar White, the President, presiding. Twelve committees reported on work done during the summer and plans for the fall.

The Red Cross Committee will continue sewing for the Atlanta Chapter, which provides the material, to help in relief among the poor.

The Hospital Committee is especially interested in constructive service in the white children's ward at Grady Hospital, working under the direct supervision of the superintendent of the ward and of the social worker in the admittance office. Upon the discharge of a patient who, in the doctor's opinion, would benefit through supervision in the home, information was given regarding the case, visits made to the home, reports made and brought to the hospital. In every instance the appreciation of the family was sur-

prisingly great. This work is being done to stimulate interest in the need for a paid social service worker for follow-up work in the City employ. Justice to the child and home urge it, and the salary of such a worker would be more than covered by the expense saved by "repeaters." Miss Dickerson, superintendent of this ward, was present, and spoke gratefully and encouragingly of the work of the committee at Grady Hospital.

To help in an intelligent visiting service, a class in home hygiene was formed which will meet twice a week for fifteen lessons. Miss MacDonald, R.N., in charge of such classes explained that part of the instruction would be in making the accommodations of the ordinary home provide adequate and comfortable service for the patient.

The Health Education Committee plans an early meeting to entertain the executive officers of the county women's organizations with a Health Education program, in order to forward the health work under Auxiliary leadership and direction; and to secure speakers from the local medical society for these groups.

The Citizenship Committee is going to form a class in citizenship, that the women may become better informed in local and state government and be ready to exercise the franchise for community welfare.

The Auxiliary voted to help in the annual Forget-me-not Day Drive.

Dr. T. C. Davison, President of the Fulton County Medical Society, was the guest speaker, talking on "The Auxiliary as a Factor in Public Health Education." From his address the members derived renewed inspiration for progress in the work of spreading the aims, ideals, and ambitions of the medical society in health work to lay organizations.

The President of the Auxiliary read a report of the A. M. A. Auxiliary Convention held in Philadelphia last June.

The Auxiliary will meet October 2nd, in Atlanta.

Mrs. Arthur McGlothlan, President of the Woman's Auxiliary to the A. M. A., has ap-

pointed Mrs. Bonar White one of the five members of the Committee on Public Relations of the National Auxiliary, making her Southern Regional Chairman.

NINTH DISTRICT AUXILIARY

The regular semi-annual meeting of the Auxiliary to the Ninth District Medical Society, was held in Tate, Wednesday, September 16, with Mrs. C. L. Ayers, Chairman, presiding.

After the devotional a most cordial welcome was extended the organization by Mrs. D. H. Garrison of the Cherokee-Pickens Auxiliary.

Dr. W. A. Selman, Atlanta, was the first speaker introduced. In his message he complimented the Auxiliary for results obtained through their health programs.

The State President of the Association, Dr. A. G. Fort, was next to speak. He gave an outline of recent legislation pertaining to our State Board of Health. State Medicine and the Auxiliary's part in such a program, were among other points in the talk.

The following papers were read:

Greetings and a message from Mrs. Ralston Lattimore, President of State Auxiliary, read by secretary.

"Communicable Disease Control" by Mrs. V. H. Basset, read by Mrs. William H. Garrison.

"Why Have an Auxiliary" message of Mrs. S. T. R. Revell, President-Elect and chairman of organization, read by Mrs. E. R. Harris.

"The Auxiliary and Health Education" Mrs. J. Bonar White, State Chairman of Health, read by Mrs. J. H. McClure.

After the reading of the minutes, the following counties answered roll call: Barrow, Cherokee, Pickens, Habersham, Hall, Jackson, Stephens.

Mrs. C. B. Almond, State Hygeia Chairman, made an earnest appeal for campaign for more Hygeia subscriptions.

Mrs. J. K. Burns, of Gainesville, was appointed Ninth District Hygeia Chairman.

The immediate needs of the Students Loan Fund were read in a letter from Mrs. William Shearouse, Savannah, Ga. Representatives of all counties present were urged to send in their quota at once.

Members were requested to send clippings and news items of interest to Mrs. S. T. Ross, for the Scrap Book.

There were twenty-five members and six visitors present.

After an enjoyable entertainment in the school auditorium, luncheon was served at the hotel. Tours over the mountains and marble works were conducted by local parties. Next meeting will be held in Gainesville.

MRS. WILLIAM H. GARRISON, *Sec'y.*
Clarksville, Ga.

Mrs. Ralston Lattimore, State President of the Woman's Auxiliary to the Medical Association of Georgia, was requested to extend a welcome to the Georgia Nurses' Association, on the opening night of their annual convention, in Savannah, Oct. 26th.

WOMAN'S AUXILIARY-AMERICAN MEDICAL ASSOCIATION

Our national president-elect, Mrs. Walter Jackson Freeman, of Philadelphia, went to Europe the first of August expecting to return the last of September; but has been detained indefinitely by the illness of her son who is laid up in Munich with an attack of inflammatory rheumatism. However, Mrs. Freeman is taking care of her department in the Bulletin of the American Medical Association.

Our national president, Mrs. A. B. McGlothlan, attended the annual meeting of the Auxiliary to the Kentucky State Medical Society, Lexington, Ky., September 7-10. She reports many interesting features of that Auxiliary.

In Kentucky, each month, from four broadcasting stations a ten minute health talk is given. Various physicians of the State Medical Association are selected to give these talks.

The Kentucky Auxiliary promoted a contest carried on in ten counties in which a prize was given to the school boy or girl writing the best essay on the value of a County Health Unit.

It is worth knowing that the American Medical Association will supply five minute radio talks on seventy-two different health topics, and fifteen minute radio talks on sixty-two different health topics.

The president of the Texas Auxiliary, Mrs. H. R. Dudgeon, reported in Waco, July 14, that Texas had forty three organized and working auxiliaries—and more coming. A good organization record to emulate!

In his message to the Woman's Auxiliary to the Colorado State Medical Association, Dr. E. S. Judd, president of the American Medical Association, reminds the women of the opportunities for service to scientific medicine through their membership in lay organizations. He quotes the President of the Maine Medical Association as saying a systematic propaganda was being carried out for the purpose of promoting irregular medical practises. This is done by sending representatives to women's clubs and other organizations to disseminate the information. "If women's auxiliaries", says Doctor Judd, "will assume the responsibility of helping the members of their clubs and also the parent-teacher associations keep informed regarding the proper medical practises they could perform a great service to their communities".

GEORGIA STATE NURSES ASSOCIATION

Officers

President—Miss Lucia Masee, R. N., Cuthbert
First Vice-President—Miss Dora A. Kershner, R. N., Macon.

Second Vice-President—Mrs. Mae M. Jones, R. N., Milledgeville.

Secretary—Miss Winnie B. Wood, R. N., Macon.

Treasurer—Miss Jane Van De Vrede, R. N., Atlanta.

Miss Jane Van De Vrede, R. N.

Executive Secretary

District Presidents

First—Mrs. Dorothy Treacle, R. N., Savannah.

Fourth—Miss Eva Chalkley, R. N., Columbus.

Fifth—Mrs. Sue B. Paille, R. N., Atlanta.

Sixth—Miss Dora A. Kershner, R. N., Macon

Seventh—Miss Shirley Hamrick, R. N., Cedartown.

Eighth—Mrs. W. C. Thurmond, R. N., Athens.

Ninth—Miss Ruby Falls, R. N., Gainesville.

Tenth—Mrs. Joseph Akerman, R. N., Augusta.

Headquarters

131 Forrest Avenue, N. E., Atlanta.

THE AMERICAN JOURNAL OF NURSING — AN AUTHORITY

The importance and value of the American Journal of Nursing as an educational medium to the nurses of this country, and to nursing interests generally, is being clearly demonstrated by its steady growth and the increased subscriptions coming from nurses, from schools of nursing, from hospitals, from doctors and others. Many schools of nursing have adopted The Journal as a textbook, and monthly it is to be seen on the table of the library of practically every school in the United States, and in many public libraries.

Owned by the American Nurses' Association, the Journal is not run for profit, but is devoted to the interests of the nursing profession, and seeks ever to increase its usefulness among this group, thus serving the public. It is edited and managed by nurses, and its pages are filled with articles written by nurses, based on actual nursing experience. Literary contributions are also frequently made by physicians and educators, many of whom find this magazine of interest.

The Journal maintains a high technical and professional level, and a well-balanced "diet" of articles, ranging from nursing techniques from the pen of well-known nurses and physicians to feature stories of educators, doctors, and nurses who have given generously to the world their service in the interest of humanity. A department of nursing education, edited by Miss Nina D. Gage, former secretary of the National League of Nursing Education and a past president of that organization, is a feature, as is a department edited by Miss Clara D. Noyes, National Director of the Red Cross Nursing Service.

In addition to nursing news from every state in the Union and from our Territorial possessions, supplied through state, district and alumnae associations, component parts of the American Nurses' Associations, the Journal carries an official directory of divisions and

state associations; also of the International Council of Nurses, with which the American Nurses' Association is affiliated, and of the two other national nursing organizations of this country, as well as government nursing services.

It contains a department for ethical problems, a students' page and an open forum. Through the department on books, abstracts from the latest medical and nursing publications are given, and a page is specially devoted to lists of publications, slides and photographs issued by the National League of Nursing Education. This material is of great assistance to administrators, instructors, and students in matters pertaining to nursing education.

Published for the first time in October, 1900, for the "Associated Alumnae of Trained Nurses of the United States", and edited by Sophia Palmer, R.N., whose first office has been described as "a suitcase under her bed", The Journal has grown in strength, dignity and usefulness with the years. Quoting from an editorial in the first issue of The Journal, "The profession has been greatly indebted to various nursing journals in the field, but these journals have not been owned or controlled by nurses; and in establishing an independent magazine, the Associated Alumnae of Trained Nurses of the United States is but following in the footsteps of all large organizations by having an organ of its own. This Society, working on advanced ethical and educational lines, standing for that which is most womanly and most progressive in nursing, has much valuable information to impart to the public as well as to the nursing profession at large. The names of the women who have been selected to manage and edit the magazine should be a sufficient guarantee of the conscientious and thorough manner in which the work will be performed. The duties that each one has pledged herself to perform gratuitously for the first year are

an added burden to lives already heavy with care. It will be the aim of the editors to present month by month the most useful facts, the most progressive thought and the latest news the profession has to offer. In order to do this, they must have the personal cooperation of the four thousand members of the Society, to whom they will look for every kind of information of value to nurses.

"Nursing in some form enters sooner or later into the life of every home. Until men and women whose names honor the boards of management of hospitals and other philanthropic enterprises are in close touch with nurses, frictions and factions will result. The Journal will be of much importance in the home and in these institutions".

This first number contained, among others of almost equal interest, an article on Infant Feeding by W. B. Thistle, M.D., L.R.C.P., London, England, and Toronto, Canada, lecturer on clinical medicine and diseases of children in the University of Toronto; one on Hospital Economics by Isabel Hampton Robb, R.N., first superintendent of Johns Hopkins Hospital school of nursing, and one on hospital and training school questions from the pen of Linda B. Richards, the first woman in this country to enter a training school for nurses. Miss Richards had then been nursing actively for twenty-eight years. She passed away in 1930.

Miss Mary M. Roberts, R.N., has been editor of the American Journal of Nursing for the past ten years. Miss Katharine DeWitt, R.N., who has been associated with The Journal since its infancy, is Managing Editor; and this organ of the American Nurses' Association now has spacious quarters in Nelson Tower, 450 Seventh Avenue, New York City, which is also the home of the American Nurses' Association, the National League of Nursing Education and of the National Organization for Public Health Nursing.

There is no doubt that The Journal has been a prime factor in the steady growth of the American Nurses' Association from the four thousand members recorded in 1900 to its present membership of almost one hundred and ten thousand nurses.

The Journal has doubled its Georgia subscribers within the last year.

The November number of The American Journal of Nursing has the following articles in which physicians, especially those who contribute to the teaching of nurses, will be interested:

Epidemic Encephalitis—Patricia Steen, M.D., New York.

Nursing Care of Acute and Chronic Encephalitis—Eloise Shields, R.N., Iowa.

The Good Samaritan Infusion Radiator—Sister M. Theodore, R.N., Ohio.

Rotation of Students—Grace Gummo, R.N., New York.

The College of Nursing—Frances Goodall, S.R.N., England.

Testing Nose and Throat Disinfectants—Jean Broadhurst, New York.

Seal Sale—National Tuberculosis Association.

Uniforms—National.

Brazilian Nurses' Exhibit—Mrs. Ethel Parsohs, R.N., Brazil.

New Drugs—Margene Faddis, R.N., Ohio.

The Harmon Plan—Jane Van De Vrede, R.N., Georgia.

Nursing and the League of Nations—International.

Educational Possibilities in Clinical Charts—Mrs. Nan H. Ewing, R.N., Illinois.

Worthy to Serve the Suffering—C. Jeff Miller, M.D., Louisiana.

Tuberculosis and the Private Duty Nurse—Mrs. Violet H. Hodgson, R.N., National.

Can Your School Pass?—Doctor Burgess, National.

Notes from A. N. A. Headquarters—National.

Red Cross Drive—National.

Some Specialists—Lois Emily Reid, R.N., and Esther Fairchild, R.N., Illinois.

Department of Nursing Education

An Experiment in Cooperative Planning—Ethel Johns, R.N., New York.

DISCUSSION BY:

1. A Director of a Nursing School—Jean Gunn, R.N., Canada.

2. A Superintendent of a Hospital—E. Muriel Anscombe, R.N., Missouri.

3. Chief Superintendent, Victorian Order of Nurses of Canada—Elizabeth Smellie, R.N., Canada.

STUDENT NURSES' PAGE:

Home-coming—Helen Sears Wilson, Wisconsin.

The United States Civil Service Commission announces open competitive examinations for nurses as follows:

Chief Nurse (Indian Service).

Head Nurses (Indian Service).

Graduate Nurse (Various Services).

Graduate Nurse, Visiting Duty (Various Services).

Applications must be filed not later than December 30, 1931.

Full information may be obtained from the Secretary of the United States Civil Service Board of Examiners, Washington, D. C.

According to Ina M. Richter, San Francisco (Journal A. M. A., Oct. 10, 1931), congenital heart lesions are not uncommon, and they give rise to symptoms and physical disability, though to a far less degree than do rheumatic endocardial and myocardial lesions. The valvulitis characteristic of the rheumatic syndrome is not uncommon in a mild climate like that of San Francisco, but its manifestations are much less dramatic and its inception is far more insidious.

BOOK REVIEWS AND ABSTRACTS

BOOKS RECEIVED

Clinical Diagnosis by Laboratory Methods. Todd and Sanford, 7th Edition; W. B. Saunders and Company, Price \$6.00.

The new edition of this popular laboratory manual has been changed only insofar as has been necessary to include recent advances in laboratory methods. New blood chemistry methods, and the Ascheim-Zoudek test and modifications are additions to this edition. Some of the obsolete methods have been omitted leaving the book about the same size as the previous edition. It is still the same clear, concise compend of laboratory information presented in the way that has made former editions the most satisfactory book of its kind for students and laboratory technicians. It is full of information in accessible form and no laboratory or clinician should be without a copy of this standard work.

GEORGE F. KLUGH, M.D.

New and Nonofficial Remedies, 1931. containing descriptions of the articles standing accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1931. Cloth. Price, postpaid, \$1.50. Pp. 481+LVI. Chicago: American Medical Association, 1931.

This volume is the annual publication of the Council on Pharmacy and Chemistry of the American Medical Association, giving the latest authentic information concerning those of the newer medicinal preparations found worthy of the consideration and use of the medical profession. Each year the Council scans the general articles under which the various preparations are classified and revises these to conform to the latest and best medical thought.

A glance at the preface shows that a number of preparations have been omitted because they conflict with the rules that govern acceptance, because their distributors did not present evidence to demonstrate their continued acceptability, or simply because the manufacturers have taken them off the market. Important revisions have been made in a number of the general articles and in the descriptions of various preparations. Among the new preparations that have been found by the Council during the past year to be eligible for admission to the book are: Amytal and Pulvules Sodium Amytal, 3 grains, barbituric acid derivatives for use preliminary to surgical anesthesia; Thio-Bismol, quinine bismuth iodide, sodium potassium bismuthyl tartrate, and Tartro-Quiniobine, bismuth compounds for use in the treatment of syphilis; Scillaren and Scillaren-B, preparations containing the squill glucosides; two new cod liver oil concentrates; Synephrine, a new vasoconstrictor, and synthetic thyroxine.

New and Nonofficial Remedies should be in the hands of all who prescribe drugs. The book contains information about the newer materia medica which cannot be found in any other publication.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1930. Cloth. Price, \$1.00. Pp. 91. Chicago: American Medical Association, 1931.

This book is essentially a record of the negative actions of that distinguished body, the Council on Pharmacy and Chemistry of the American Medical Association; that is, it sets forth the findings concerning medicinal preparations which the Council has voted to be unacceptable for recognition and use by the medical profession. Many of the reports record outright rejection or the rescinding of previous acceptances; others report in a preliminary way on products which appear to have promise but are not yet sufficiently tested or controlled to be ready for general use by the profession.

Among the reports recording outright rejection are those on: Avesan (H), formerly Nuforal, a mixture stated to be composed of formic acid, sodium nucleinate, camphor, allyl sulphide and chlorophyll, with traces of salicin and sulphuric ether, marketed with unwarranted claims of usefulness in the treatment of tuberculosis, asthma, and other respiratory diseases. Ceanothyn, once before rejected and still found to be marketed with unsupported therapeutic claims; Collosol Calcium and Collosol Kaolin, so-called colloidal preparations, the former an unscientific mixture of unproved value, the latter a possibly dangerous preparation, and both marketed with unwarranted claims; Ephedrol with Ethylmorphine Hydrochloride, an unscientific ephedrine preparation marketed under an unacceptable proprietary name with unwarranted therapeutic claims; Farastan, an unscientific iodine-cinchophen preparation proposed for routine use in "arthritis . . . and Rheumatoid conditions"; Haley's M-O Magnesia-Oil, a magnesia magma and liquid petrolatum mixture in fixed proportions marketed with emphasis on the "M-O"; Lydin, a testicular extract, marketed with claims of value in the treatment of impotence; and Metatone, a shot-gun "tonic" mixture marketed under a proprietary name with unwarranted therapeutic claims.

BOOKS RECEIVED

Accidental Injuries. The Medico-Legal Aspects of Workmen's Compensation and Public Liability. By Henry H. Kessler, M. D., Medical Director, New Jersey Rehabilitation Clinic; formerly Medical Adviser, New Jersey Workmen's Compensation Bureau; Consulting Orthopedic Surgeon, Irvington General Hospital and Essex County Hospitals; Associate Orthopedic Surgeon, Newark Beth Israel Hospital; Assistant Orthopedic Surgeon, Newark City Hospital, Hospital and Home for Crippled Children. Contains 718 pages, illustrated with 157 engravings. Publishers: Lea & Febiger, Washington Square, Philadelphia, Pa. Price \$10.00.

The Fulton County Medical Society and the Fifth District Dental Society ratified plans to build jointly a permanent home for both organizations at 27-33 Fifth Street, N.E., Atlanta, to be known as the "Academy of Medicine and Dentistry".

The Bulletin of the Southern Medical Association carried the following notice in reference to the meeting of the Southern Medical Association to be held at New Orleans, November 18, 19, 20: "After seven years, the Orleans Parish Medical Society, New Orleans, is again host to the Southern Medical Association. New Orleans, 'city of romantic traditions' is ideal for any kind of a meeting, but particularly for a medical meeting. It stands out as one of the leading medical centers of the country, and can give just the atmosphere necessary for the full enjoyment of a great medical gathering. A medical meeting, where the scientific activities are of primary importance and all others are secondary, is 'a necessity, not a luxury'. A well rounded medical meeting, complete in every detail, is just what the busy physician needs to refresh and broaden him. The Southern Medical is that type of meeting—it is the kind of meeting that makes better physicians of those who attend. At the Louisville meeting last year a member was overheard to say that he looked upon the cost of attending the Southern Medical meeting each year as an investment, not as an expense. He voiced the feeling of many hundreds of other members".

The Jackson County Medical Society met at the Allen Clinic and Hospital, at Hoschton, on October 5th. Dr. and Mrs. L. C. Allen entertained the members at luncheon.

The Georgia Urological Association met at the Dempsey Hotel, Macon, on October 29th. The following subjects of case reports were on the program: "Rupture of the Corpus Cavernosa", Dr. E. B. Anderson, Americus; "Unusual Scrotal Tumor", Dr. William Shearouse, Savannah; "Calculi in a Child", Dr. W. P. Jordan, Columbus; "Sarcoma of the Bladder", Dr. V. H. McMichael, Macon. Papers on the program were: "Cancer of the Prostate and Bladder", Dr. Montague L. Boyd, Atlanta; "Treatment of Gonorrhea", Dr. William L. Champion and Dr. M. F. Fowler, Atlanta; "Subjective Syphilis", Dr. W. B. Emery, Atlanta; "Obstruction at the Vesicle Neck in Male Infants and Children", Dr. Hamilton W. McKay, Charlotte, N. C.

OBITUARY

Dr. James Cloud Phillips, Savannah; Georgia College of Eclectic Medicine and Surgery, Atlanta, 1913; aged 41; died at his home on September 25, 1931. He formerly resided in Lithonia and was a well known physician with many friends in Lithonia and Savannah. Surviving him are one brother, J. E. Phillips, Lithonia; one sister, Mrs. Lottie Mae Wimberly, Danville, Georgia. Funeral services were conducted from the Lithonia Methodist church by Dr. J. M. Elliott. Interment was in Chupp cemetery near Lithonia.

Dr. Joseph C. Hooten, Ellerslie; Emory University School of Medicine, Emory University, 1893; aged 60; died at his home on September 25, 1931. He was born and reared at Woodbury. Doctor Hooten moved to Ellerslie after receiving his degree in medicine where he practiced for more than thirty-five years. Surviving him are his widow, four sons, Basil, Joseph and Gerald Hooten, Ellerslie; Oscar Hooten, Rocky Mount, N. C. Funeral services were conducted by Rev. Tribble from the Ellerslie Baptist church and interment was in the village cemetery.

Dr. Burwell Atkinson, Waverly; Emory University School of Medicine, Emory University, 1876; aged 83; died at his summer home at St Simons Island on September 22, 1931. He was widely known in Camden county where he practiced medicine for many years. Doctor Atkinson represented Camden county in the General Assembly of Georgia and served as State Senator from his district for one term. Surviving him are his widow, three daughters, Mrs. Marion A. Nolan, Marietta; Mrs. Mary Cleveland Russell and Mrs. Paul Lovejoy, Spring Hill; one son, Burwell Atkinson, Jr., Spring Hill. Funeral services were conducted by Rev. T. W. Simpson at Waverly and interment was in the village cemetery.

TEN YEARS OF PREVENTIVE INFANT FEEDING

Ten years ago this month the S. M. A. Corporation, then the Laboratory Products Company, announced an epoch-making development, S. M. A., to the medical profession. It represented a new idea—namely, that cow's milk could be modified to resemble breast milk so closely that about 95 per cent of the infants deprived of breast milk would do well on it, and that the anti-rachitic factor, cod liver oil, could be included so that no other protection would be necessary. S. M. A. is still the only anti-rachitic infant food available.

The idea for this adaptation had been conceived back in 1910, now twenty-one years ago. Clinical tests began in 1913. A preliminary report made to the American Pediatric Society in 1915 and a more extensive and elaborate one in 1918 before the Section on Diseases of Children of the American Medical Association proved that S. M. A. was a marked advance in infant feeding.

The results obtained from feeding S. M. A. were so remarkable that practising physicians asked for it. Eventually such a demand developed that S. M. A. was offered to the medical profession generally. It is estimated that to date more than three hundred million feedings have been prescribed by physicians, all over the United States and in several foreign countries.

The first infants to be fed S. M. A. are now school children and these together with hundreds of thousands of others are living examples of the soundness of the nutritional principles of S. M. A. in its first decade of service.

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1931-1932

NEXT ANNUAL SESSION, SAVANNAH, MAY 17, 18, 19, 20, 1932

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 Alternate, Wm. A. Mulherin, Augusta.
 C. W. Roberts, Atlanta (1931-2).
 Alternate, B. T. Wise, Americus.
 O. H. Weaver, Macon (1932-3).
 Alternate, C. K. Sharp, Arlington.

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 M. M. McCord, Rome, Clerk.

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1. Wm. H. Myers, Savannah (1933).
2. J. A. Redfearn, Albany (1933).
3. J. C. Patterson, Cuthbert (1933).
4. O. W. Roberts, Carrollton (1933).
5. W. A. Selman, Atlanta (1934).
6. K. S. Hunt, Griffin (1934).
7. M. M. McCord, Rome (1934).
8. H. M. Fullilove, Athens (1934).
9. C. L. Ayers, Toccoa (1932).
10. S. J. Lewis, Augusta (1932).
11. A. S. M. Coleman, Douglas (1932).
12. J. Cox Wall, Eastman (1932).

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2. R. F. Wheat, Bainbridge (1933).
3. Chas. A. Greer, Oglethorpe (1933).
4. W. H. Clark, LaGrange (1933).
5. Marion C. Pruitt, Atlanta (1934).
6. A. H. Frye, Griffin (1934).
7. W. H. Perkinson, Marietta (1934).
8. M. A. Hubert, Athens (1934).
9. J. K. Burns, Jr., Gainesville (1932).
10. H. D. Allen, Jr., Milledgeville (1932).
11. K. McCullough, Waycross (1932).
12. J. W. Edmondson, Dublin (1932).

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 J. W. Palmer, Ailey (1932).
 A. R. Rozar, Macon (1933).
 Allen H. Bunce, Secretary-Treasurer, Atlanta.
 T. F. Abercrombie, Atlanta, Commissioner of Health,
 State of Georgia.

MEDICAL DEFENSE

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 Wm. A. Mulherin, Augusta (1934).
 C. L. Ayers, Toccoa, Chairman of Council.
 Allen H. Bunce, Atlanta, Secretary-Treasurer.

HOSPITALS

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 C. H. Richardson, Jr., Macon (1933).
 K. McCullough, Waycross (1934).
 George F. Klugh, Atlanta (1935).
 Arthur D. Little, Thomasville (1936).

ABNER WELLBORN CALHOUN
LECTURES

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 H. I. Reynolds, Athens (1934).
 Eugene E. Murphey, Augusta (1935).
 Craig Barrow, Savannah (1936).
 Frank K. Boland Atlanta (1932).

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 George Bachmann, Atlanta.
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 J. W. Edmondson, Dublin.
 Jas. J. Clark, Atlanta.

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 Marion T. Benson, Atlanta.
 W. E. McCurry, Hartwell.
 Ralston Lattimore, Savannah.
 Paul L. Holliday, Athens.

FRATERNAL DELEGATES TO OTHER
STATE MEETINGS

To visit Alabama: John M. Poer, West Point;
 C. W. Strickler, Atlanta.
 To visit Florida: J. R. Jordan, Ellaville; I. W.
 Irvin, Albany.
 To visit North Carolina: J. K. Burns, Gaines-
 ville; Frank Eskridge, Atlanta.
 To visit South Carolina: Hal M. Davison, Atlanta;
 H. J. Rosenberg, Atlanta.
 To visit Tennessee: A. R. Rozar, Macon; Geo. B.
 Smith, Rome.

RECIPE FOR COOKING MEAD'S CEREAL

When cooked according to the following recipe, and served with milk, Mead's Cereal is eagerly accepted by infants:

Place 2 rounded tablespoons Mead's cereal and 1 cup cold water in upper section of double boiler, mixing with fork or wire whip. Place over direct flame for 10 minutes, while stirring. Replace upper section over lower section of double boiler and continue cooking for half an hour the night before, and half an hour before serving, stirring occasionally, or, leave double boiler over "pilot" gaslight until morning. This makes a day's supply for the average infant. Number of tablespoons fed is increased from 2 tablespoons, according to age.

For older children, the consistency may be increased by using one-half cup of Mead's cereal and 2 cups water (2 to 3 portions). Served with cream and sugar, Mead's cereal deliciously supplies the growing child with protein, fat, carbohydrate, calories and what is more important—*Calcium, phosphorus, iron, copper and other essential minerals.*

THE RICHMOND COUNTY MEDICAL SOCIETY

(Continued from Page 443)

scholarly compilation of every view entertained at that time and was the incentive for more time and greater effort being put upon the preparation of other papers later presented. At a still later period Doctor Coleman introduced a stimulus for larger attendance upon the meetings for which he should be given credit and thanks. It was when he was President. He called the meeting at his home and announced that at the conclusion of the meeting beer and refreshments would be served. There was one hundred per cent attendance.

The writer can find no record of any special note from this period until the World War. While probably fifty per cent of its members were in the army and the remainder unusually busy, the society did not miss a meeting, and during the time when the soldiers were here, acted as hosts to the medical officers on numerous occasions. A Christmas celebration given by the society to the medical corps of the camp was particularly enjoyable.

In reading the minutes from 1905 to date, the writer has been impressed by the fact that very nearly every disease in the whole category has been written about and well discussed by its members, and the conviction borne in that those who consistently attend its meetings will receive a liberal education therefrom, and the incentive to do better work.

The writer has likewise been impressed with the fact that the society has earnestly supported every measure for the advancement of the profession and the good of the state and county, and has likewise condemned everything that has seemed to them not to be wise and helpful.

WANTED

Registered Laboratory Technician, 22 years of age, wants position in doctors office or hospital. Experienced in Diathermic and Violet-Ray treatments, Basal Metabolism tests, hospital historian and assistant dietitian. Attractive personality and congenial. Best of references. Write what you have to offer. Address "C", care of the Journal.

FOR SALE

\$6,000.00 X-Ray outfit complete in perfect condition. In use about three years. Property of the Griffin Hospital. Will be sold cheap. Address, Dr. J. Render Anthony, Griffin, Ga.

POSITION WANTED

Graduate dietitian with two years' hospital experience; excellent references. Address M. F. H., 1220 East Thirty-First Street, Savannah, Ga.

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Drug and Alcoholic patients are humanely and successfully treated in Glenwood Par Sanitarium, Greensboro, N. C.; reprints of articles mailed upon request. Address W. C. Ashworth, M.D., Owner, Greensboro, N. C.

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Strictly fresh infertile eggs produced by hens fed clean wholesome grain and mash, with pure well water for their drink. Mash contains Silmoesterol—(2-X irradiated ergosterol). Eggs analyse 12% fat, as compared with Government analyses of 9% for average egg.

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THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

DEVOTED TO THE WELFARE OF THE MEDICAL PROFESSION OF GEORGIA
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Volume XX

December, 1931

Number 12

BACTERIOLOGIC FACTS AND FANCIES*

LEE HOWARD, M.D.
Savannah

This attempted bit of propaganda is in no sense a scientific paper. Such being the case, the title does not define the subject, but seems apt and euphonious.

In medicine, there develop widespread tendencies and practices that we have to admit are little better than passing fads. They come and go not unlike song hits, movie stars, and other vogues, which enjoy an intense but usually transient popularity. A few examples will suffice: not long since, blood letting was in high favor and resorted to in almost every medical and surgical emergency. Now we have blood transfusion, which bids fair to give back, many times over, all the blood ever spilled through venesection, or otherwise.

With a few regrettable exceptions, harmful fads in medicine have been shortlived, many, in fact, are phases of over-enthusiasm, often merely the over-rating of new, but sound principles which are unfamiliar and unproved in their application. Progress in medicine may even be retarded by such sometimes well meant overdoing. For example, the absurd "monkey business" for a time made gland therapy the brunt of such ridicule that undoubtedly much good work in this important therapeutic field was negated.

During the past decade there has developed, to say the least, a "hyperbacterialism." The growing tendency to over-emphasize in some fields of bacteriology, especially in that of biologic therapeutics, has of late been greatly accelerated. In fact, definite abuses of sound, useful, bacteriologic principles have become so common that they seem to threaten to

lower the standard of medical bacteriology, and in so doing discredit physicians and the ethical practice of medicine in general.

Both we physicians, bacteriologists not excepted, and our patients have been and are still perpetrating and accepting many abuses in the name of bacteriology. Certainly, many of our patients have been filled with bacterial products and by-products, of all sorts. The slogan is: "If you know what is wrong, give a serum; if you don't know, give a few shots anyway, they can do no harm." In other words, an "Era of Sera".

The limitations of the essayist demand a localized attack on a problem so intensely interesting and at the same time most important. As an illustration: from a widespread, protean infection, "bacterialitis," we select for special consideration one particular focus and host. This single phase chosen from the problem of bacterial abuses is the improper promoting and administering of many valueless, non-potent and often preposterous vaccines and sera, by members of the medical profession.

Having finally cited an abuse so evident and common, we feel that the diagnosis is certain, and the chief need, prophylaxis and treatment. However, we will first attempt to classify some of the factors that have a particular bearing on this intricate problem.

To consider only that role played by the medical profession, does not offer a very narrow or easy approach. It will help to include every branch and science related to the practice of medicine as a unit, since no part seems immune in such a classification.

We leave to Doctor Fishbein and the A. M. A. such quacks as are without the pale of organized medicine. It seems logical to first separate those who wrongly promote, apply, or neglect bacterial therapy, into two main antagonistic groups: those (the majority) given to all sorts of excesses, and the

*Read before the Medical Association of Georgia, Atlanta, Ga., May 14, 1931.

minority, composed of nihilists who will not use or assign any therapeutic value to bacterial products of any sort.

We next divide Group I, "The Overdoers," which we fear comprises a large percentage of practicing physicians, into three distinct classes:

- (a) Charlatans.
- (b) The honest but ignorant.
- (c) Misguided leaders.

Class A is relatively small, but there is probably nothing in medicine more suited to the ends of a dishonest doctor than biologic products. The public, aside from the normal number of suckers, especially the ignorant, is largely imbued with the idea that many cures, and almost miracles, are effected by specific bacterial agents. Those better informed are usually easy victims of the personality and salesmanship often possessed by this type of physician. Many degrees and sorts of bacterial rascality are perpetrated by this degraded group. There are medical crooks as ignoble as can be found outside the profession, or in any other profession, who stoop to any claim or practice that will yield a dollar or advance their interests. Very expensive, secretly prepared, always guaranteed cures, are offered and often sold. A known example: a barber, making less than \$25.00 a week, paid \$35.00 for a secret serum, a few inoculations of which were guaranteed to cure him of diabetes. As a matter of fact, this man was a victim, not of diabetes, but an unscrupulous physician. Those possessed of larger means naturally pay more for this sort of service.

Class B is much larger and more important: the honest, average doctor who goes wrong in the use of bacterial products, not through inherent ignorance, but through misunderstanding a much exploited, intricate, and little known branch of therapeutics. There is every gradation from those who give products of unproved value a brief trial only, to those who are so imbued with the possibilities of this specific form of therapy that they become fanatical and give bacterial nostra of all kinds in every sort of case.

Between these two extremes, are those given to theorizing, who easily get off on some one line of bacterial abuse. Others

change their bacterial hobbies from time to time, often to meet the demands of rapid, and radical new developments in the literature. It is easy for the lax, or overworked physician to follow along lines of least resistance in therapy: to meet the psychologic, rather than the physiologic, demands, in cases of difficult or uncertain diagnoses. Commendable zeal and effort "to do something for the patient," is responsible for much over, and useless giving of vaccines and antitoxins. It is but human to grasp at anything in trying to combat a fulminating, fatal infection, and the natural recourse is some biological specific.

In turning to *Class C* of our division of those who offend, there is a feeling that we have reached an important crux in this bad situation. This, possibly smallest of the three classes in number, is not a group of average physicians, largely engaged in the general practice of medicine, but leaders throughout both the main and allied branches, many of whom are specialists of outstanding ability and achievement. From these come the ground work and dissemination of bacteriotherapeutic principles and practices. Even a few abuses emanating from such authoritative sources, have far-reaching effects, and do incalculable harm. In this new, interesting, rapidly expanding, but abstract, bacteriologic field, some errors are inevitable. The best sort of research and thought may at times result in logical but wrong conclusions. However, in applied bacteriology, we find such errors negligible compared with those due to the bacteriologic fancies, personal hobbies, and pet theories, foisted by a few leaders in our profession.

Some reach such heights of folly in their fancies, that to consider the deteriorations of senility the prime factor, seems charitable. It is hard to know who in this class are fundamental cranks, or how many develop unusual peculiarities through too close an application along narrow lines of work. Many able men, even authorities in their chosen specialty, for some reason attack moot bacteriologic problems which are not in line with their training or ability. Most in this higher class, we feel, are sincere both in their tenets and efforts. The menace lies not in the wrong theorizing, or misdirected researches,

of these "leading lights", as such, but in the authoritative propaganda that emanates, and finally reaches and influences, every branch of medicine. Especially, is there a considerable, increasing volume of misleading publications covering every phase of both the theory and application of bacterial therapy. The alert minds of some of these eminent enthusiasts, when diverted, are most productive, as demonstrated by the bulk of current literature on this subject. The challenge of a therapeutic problem, so almost devoid of fact and replete with speculation, naturally appeals to the able, and particularly to those possessed of inordinate imagination. Once a pet theory, or method, is evolved the author soon becomes a propagandist, a veritable crusader, whose facile pen is ever busy in an effort to prove his point, or substantiate his findings.

The charlatan, or his dishonest practices, may be shown up in their true light, the wrong bacterial mindedness and practices of "lesser lights," may be corrected or refuted by their betters, but when even a few leaders of national note go wrong in their bacteriologic work or teachings, harm is done almost beyond repair. If these perpetrators of bacterial abuses are sufficiently famous, and active, their errors are quickly taken up by a large part of the medical fraternity and passed on to the general public. It is surprising how quickly, even harmful, bacterial medicinals may in this way achieve a widespread popularity and application. Once a considerable number of either physicians or lay persons are imbued with the importance of highly promoted, but impotent, bacterial panacea, a grave problem exists. In concluding this important chapter it is feared that some few of our leaders, in following a false scent in such full cry, may soon attract and be followed by the entire pack.

The second minority division, those physicians who discredit bacterial therapy, can be dismissed with a brief consideration. Practitioners with this attitude can be classed usually as very ignorant, hypercritical or cranks. Most others who view this entire line of therapy, or some useful part, with extreme skepticism, are confined to limited fields of research, and so far apart from the practice

of medicine that they know little of our practical needs or achievements.

This paper, is in no sense, intended as a destructive criticism of bacteriology, practicing physicians, or biologic therapy. The extreme examples, repetitions, and maybe, hypercritical treatment, are for sake of emphasis, and with the idea that, as a first step toward ridding the medical profession and the public of these too obvious abuses; we, the members of various medical organizations, should first air our own dirty linen.

Although a suitable climax in this particular phase of bacterial abuses has been reached, it is not possible to leave this problem without first presenting a few of the many practical remedies suggested.

To follow the classification: For the crooked doctor, we can find no remedy. The naturally suggested need, reform, is remote, and ways and means unknown. To take away their pet instruments, "shot and serum," would only mean they would soon take up others almost as bad.

Education is the natural keynote of remedy for the many mistakes made by the average physician in the use of bacterial products. Here better co-ordination and more consultations is a practical need. Those too busy or lazy to keep up with what is best in this rapidly changing field of applied bacteriology, should consult with, or call in, someone more capable. Up-to-date bacteriologists, and those vitally interested in the laboratory side of the problem should not seclude themselves in a maze of secrecy, but be of practical help to the practitioner when possible. When schooled in this special field we should be ever ready and willing to direct and help when called upon by our fellow physicians, taking care to clarify rather than muddle their problems. There is a great need for busy practitioners to keep up with constructive development in bacterial therapy and especially should they have a working knowledge of the few facts and generally accepted usages now available. There is an even greater need for the bacteriologist and laboratory man to get in closer touch with the therapeutic practice of medicine which is the chief objective of all medical science. Despite great progress towards that important bac-

teriological product, "preventive medicine" is yet an objective and a rather distant ideal. The chief business of physicians is still with the sick, not the well, and the need and demand for specific therapy becomes greater as new members are gradually added to the already long list of known bacterial diseases.

To know and give promptly a few proved specific antitoxins, (they can be enumerated on the fingers) is imperative. In prescribing or giving therapeutic vaccines it is of first importance to remember that all such preparations are dead bacterial cells containing presumably, specific bacterial toxins. At least, they practically all contain bacterial poisons of some sort. They are given for the purpose of stimulating antitoxin, or the resistive forces of the patient, by the patient. These dead bacteria have nothing to do with antitoxin, or directly relieving the patient from bacterial intoxication. Therefore, such products should never be given to a patient with a severe infection, or when signs of acute bacterial toxemia are present.

The therapeutic usefulness of vaccines, either autogenous or stock, is unfortunately still limited to a few types of focal or low grade infections. Here is the thick of the muddle where great clarifying effort is needed. Despite a better laboratory understanding of specificity, through recent studies in cross immunity, until we learn more about the chemical make-up of bacteria and their products, there can be no accurate laboratory basis for vaccine therapy. Long, careful studies by our ablest workers in this important field of research, have failed to assign or disprove a proper immunizing or therapeutic value, to all strains of bacteria concerned in human infection. Though accurate studies in the response of lower animals to well known isolated bacterial groups is a great help, we feel that a proper evaluation of vaccines of doubtful therapeutic usefulness can only come through a careful recording and compiling of results. The clinician and not the laboratory-man should be the final judge as to how and when to use these bacterial products in dispute.

There can be no better proof of usefulness or failure than comes from careful observation and record of results by practitioners.

Final conclusions, of course, can only come after a sufficiently large series of cases have been carefully studied and reported.

As a final warning, bacterial abuses especially the inordinate giving of vaccines which have no beneficial effect, aside from the aspect of ethical degradation, is not even good business and is otherwise harmful. Personality and even salesmanship are essentials to medical success, but after all, we must have something worth while to sell. A sound, productive, medical practice of any sort must be based on honest efforts and results.

To offset somewhat the foregoing serious vein, and abuses, I plagiarize the style of a fellow practitioner as a fit ending.

A certain solvent we define,
"Facts and Fancies" must combine

DISCUSSION ON PAPER OF DOCTOR HOWARD

Dr. John Funke, Atlanta, Ga.—I am very glad to have had the pleasure of hearing this paper. I have on several occasions registered my protest against the extensive abuse of the administration of vaccines, for abuse is extreme, although vaccines are useful in many cases. Much of the abuse I believe is due to the hypertrophied salesmanship of many of our biologic houses, and their extreme advertising, which induce many doctors to use these vaccines indiscriminately. I do not know to what this superadvertising will lead. I feel that the depression through which we are passing is in part due to the superadvertising of our commercial houses. There are many theories as to its cause such as high tariff, over-production, unequal distribution of gold, too rapid reduction of our National debt and so on, all of which may be true, or none of which may be true. I believe, however, that the superadvertising, which is so strong, and which is creeping into our medical profession insidiously but none the less thoroughly, has much to do with it. Vaccines have value, but it requires judgment and knowledge in order to apply them in their proper places. One should condemn indiscriminate use of vaccines, even in cases of furunculosis (though in the vast majority of such cases they are of value). In a patient diabetic with furunculosis you will probably get no result with vaccines until you treat the constitutional disease. The same thing is true of other conditions. Furunculosis may be due to infection of some other type, focal infection, or infection of the gastrointestinal tract, toxins and substances derived from the intestinal tracts. Any one of these may so intoxicate the patient that he develops furunculosis, and if you correct the toxemia the vaccines will hasten the disappearance of the furunculosis. I have seen excellent results from the use of vaccines in bronchial asthma, but I would not like to tell you that if you make a vaccine from the sputum in bronchial asthma you will get results by

injecting it. Some of the cases that are incident to an attack of influenza or of gripe, may be very materially improved by its use. I recall one instance in which a boy was unable to continue his work at Georgia Tech because of attacks of bronchial asthma. He was given a vaccine made from the material he supplied, and as a consequence completed his course. This does not prove, however, that it will act in every case. It is a question of study of each case, a question of judgment and knowledge in the use of vaccines, and I condemn their indiscriminate use, especially in the so-called "protection" against the common cold, for I think it has been very materially overdone. There was a time when I was very enthusiastic about the use of vaccines in cases of so-called gripe. Back in 1918 and 1919 I was quite enthusiastic, but my results since then I think have thoroughly cured me.

Dr. Ralston Lattimore, Savannah, Ga.—I am glad to have an opportunity to discuss Dr. Lee Howard's most interesting and timely paper. Doctor Howard, as we know, is a well trained, experienced and conservative laboratory man and always cooperates with the clinicians.

After a diagnosis is established, our effort is to be helpful to our patients, but at the same time we do not want to do them any harm, nor do we want to be guilty of the error of omission or commission. As old Josh Billings used to say: "It ain't so much in this world what we know that helps us, but what we know that ain't so."

"Bacteriologic facts and fancies" are always with us, and increasingly so.

It is difficult for some of us to realize that often patients convalesce and get well without bacteriologic vaccines or antiviral treatment; it is also well to remember that patients often die; but nevertheless, we have left nothing undone; including "bacteriologic facts and fancies."

Some years ago the only city bacteriologic work in Savannah was done in the offices of Doctor White and myself; at that time the city of Savannah sent specimens to be examined for diphtheria, malaria and pulmonary tuberculosis—the reports were either positive or negative, and we felt we were reporting facts and not fancies.

Some of the best minds of the world are working along the line of preventive medicine, immunization, and treatment.

There are many well established bacteriologic facts, with a great mass of bacteriologic fancies. At the present time it is necessary for us to discriminate in a selection for our patients.

Dr. Roy R. Kracke, Atlanta, Ga.—I think it might be well to relate an experience I had about three years ago. At that time one of our pharmaceutical houses announced a new product in the way of stock vaccine, which they claimed, because of the method of preparation, was of greater value than any product previously put on the market. They asked me to give this preparation a clinical trial, particularly in connec-

tion with their polyvalent vaccine for protection against the common cold. They sent me about 200 immunizing outfits. I carried the work out, using about 100 individuals, each of whom received five doses of the immunizing agent, and 100 controls who received nothing. This was done in the autumn. In the spring a questionnaire was issued relative to the incidence of the common cold, and much to my surprise I found that the incidence was greater among those who had received the vaccine than among those who had received nothing.

In the consideration of all types of vaccines we should first consider the most important point. Is any kind of vaccine of value in any type of pyogenic infection, whether acute or chronic? This has never been answered. In a survey by Irons of Chicago, he sent a questionnaire to a large number of physicians, and he concluded from his study that vaccine therapy is of little value from the therapeutic viewpoint in practically all conditions. We do not know whether vaccines as a whole have value or not. This has never been proven experimentally, and clinical work has been of little value because vaccine therapy is commonly accompanied by other forms of treatment and speculation is of little value.

If vaccines do have value it may be through non-specific action and, if so, such substances as milk and almost any protein might serve the same purpose. It is my experience that in a few diseases vaccine therapy has been of considerable value. It is only that class of diseases, however, that is sufficiently chronic, and that extends over a sufficiently long period for immunization to occur. It is doubtful if vaccines could be of any specific value in acute infections of any kind, although they may be of nonspecific value.

Dr. James E. Paullin, Atlanta, Ga.—May I add one corollary to the delightful paper of Doctor Howard. Bacteriologic facts originate with the well-trained, scientific bacteriologist. Bacteriologic fancies originate with pharmaceutical houses and susceptible physicians.

Dr. Lee Howard, Savannah, Ga. (closing). I thank the gentlemen for their discussion.

RECOGNITION OF CANCER OF UTERUS IN ITS EARLIER STAGES

Fred Emmert, St. Louis (*Jour. A. M. A.*, Dec. 5, 1931), states that the importance of timely recognition and the removal of precancerous lesions in relation to malignant growths of the cervix uteri is generally accepted. Among these precancerous lesions, however, leukoplakia of the cervix has not yet received the widespread attention it deserves. This has been due to a large extent to the fact that leukoplakia easily escapes inspection with the naked eye. Hinselmann has designed an apparatus called the colposcope, which permits of ready detection of even the slightest alterations of the vaginal portion and in a large number of publications he has added extensively to the knowledge and appreciation of the nature and significance of leukoplakias.

THE EARLY DIAGNOSIS OF TUBERCULOSIS IN CHILDREN

Report on 294 Intradermal Tuberculin Tests†

T. IRVIN WILLINGHAM, M.D.
Atlanta

The early diagnosis of tuberculosis in children leads the way to the prevention and cure of tuberculosis. The importance of discovering the early lesions is obvious, for in many cases such knowledge enables the physician to prevent the catastrophe of a later, adult type of pulmonary tuberculosis.

The diagnosis is not difficult if a case is gone into thoroughly instead of depending entirely upon physical or roentgen examination for a diagnosis.

The diagnosis depends upon the consideration of these factors:

1. History.
2. Symptoms.
3. Physical signs.
4. Roentgen ray.
5. Tuberculin test.

History

The patient's history should be gone into thoroughly to determine whether any member of the family has had tuberculosis and, if so, if there has been any actual contact; also if there has been contact with a tuberculous servant or other person.

If the patient has a chronic cough, perhaps a past illness such as whooping cough or measles complicated by broncho-pneumonia will throw some light on the subject.

Symptoms

Although there are no characteristic symptoms, the following should attract attention: undernourishment, failure to grow and gain weight or an actual loss in weight; poor appetite, fatigue, lack of energy, a tendency to nervousness or irritability; poor resistance to minor ailments; frequent colds, cough, usually non-productive.

Fever is usually present but of the mild degree which is so commonly caused by other conditions in childhood.

The above symptoms may be caused by

a number of other conditions, such as diseased tonsils and adenoids, sinusitis, uncinariasis, pyelitis or cardiac disease.

On the other hand, many children have the childhood type of tuberculosis without manifesting any symptoms that can be ascribed to the disease, although they may have a progressive lesion.

Physical Signs

Physical examination of the chest reveals no characteristic signs in the childhood type of tuberculosis. In order to produce signs the mass of lymph nodes must be large enough to form a considerable mediastinal tumor, or be so situated as to produce pressure upon the trachea or bronchi. The latter condition is rare.

The primary focus is so small and so lacking in collateral inflammation, and the enlarged tracheobronchial glands are so deep-seated that impaired percussion note, altered breath sounds and rales are lacking. D'Espine's sign, paravertebral dullness and scattered rales are as common in children who give a negative tuberculin test as in those having any but very advanced tracheobronchial tuberculosis. Such physical signs as anemic mucous membranes, pale skin, poorly developed and flabby muscles are more common than in the non-tuberculous child though at times those with the childhood type of tuberculosis may appear perfectly nourished and healthy.

The physical examination and laboratory examination in the study of childhood tuberculosis are of more value in the discovery of other abnormal conditions which might explain the symptoms than in demonstrating the presence of a tuberculous lesion. The discovery of diseased tonsils, otitis media, heart disease, pyuria, intestinal parasites or ova, or of malarial parasites should indicate the need of caution before diagnosing tuberculosis. If there are no defects, or if the suspicious symptoms persist after such defects are corrected, it is much more likely that the case is one of tracheobronchial tuberculosis. Tubercle bacilli are very rarely found. Only one case in the past two years in this Clinic showed tubercle bacilli and this case in a girl of eleven years with adult tuberculosis and a cavity at the apex.

†Tests done on white children aged six to twelve at the Atlanta Tuberculosis Clinic from February, 1928, through February, 1930.

Roentgen Ray

The absence of definite symptoms, physical signs and laboratory findings makes the roentgenogram of greater value in the diagnosis of the childhood type than in the adult type of pulmonary tuberculosis. In fact, it is only by this means that tracheobronchial tuberculosis can be definitely demonstrated. There should be a pair of stereoscopic postero-anterior films and an oblique or lateral on each child.

Opie¹ asserted that calcification in the lungs can be considered of tuberculous origin in practically all cases, because it so rarely occurs from other causes in children.

Bigler² said that in only one of his cases showing calcification was the Pirquet test negative. It is probable that a Mantoux test would have been positive in this one case.

But even with perfect films and an expert roentgenologist the roentgenogram has its limitations. It has been stated that it takes three years for calcium to be deposited although some cases of calcified glands under two years of age have been reported. The roentgenogram, therefore, fails to demonstrate the lesions in their earlier stages. It is also possible that densities represent latent or healed lesions and possible lesions in which there are no live tubercle bacilli.

Hence, suspicious symptoms, with no other discoverable cause, and a well marked tuberculin reaction, justify a tentative or strongly probable diagnosis of the childhood type of tuberculosis even though roentgen examination is negative. A history of prolonged exposure to open tuberculosis makes the diagnosis more certain. Roentgen evidence of tracheobronchial lesions is not sufficient for a diagnosis of active tuberculosis without a positive tuberculin test and suspicious symptoms.

Tuberculin Test

I have found the tuberculin test valuable in the diagnosis of clinical tuberculosis and think it should be routine in every suspected case.

Krause³ said:

"Here lies one of our greatest opportunities in diagnosis today. Those of us who take life and our profession seriously run the danger of despondency in contemplating the time wasted in striving to manu-

facture consumptives by all the many more or less devious or dubious methods when, days and weeks previously, a simple skin test or two would have proclaimed that the materials necessary for tuberculosis, to wit, tubercle, do not exist. This point we might have settled within two or three days of first meeting with our patient, and then gone on to more profitable and productive 'leads' as we dismissed tuberculosis from our minds."

I have made the tuberculin test on all patients seen in my clinic at the Atlanta Tuberculosis Association for the past two years.

It is recognized that in a well organized clinic or hospital the intracutaneous or Mantoux test is the method of choice due to the fact that it has the double advantage of being more sensitive and of having a quantitative value.

We use dilutions of 1:1000 of Old Tuberculin in 0.1 cc. amounts (0.1 mgm.). If the weaker dilution is negative and the case is suspicious we repeat with 0.1 cc. of 1:100 dilution (1.0 mgm.) taking care to use the opposite arm as Smith⁴ has shown that a first test will increase the sensitivity of that area and a second test if repeated in the same area is apt to give a false positive. I have not as yet obtained a positive reaction on the second or later tests with a stronger dilution when the first was negative. The tests are read in forty-eight hours and again in seven days.

A positive tuberculin reaction means that tubercle bacilli have lived and grown in the body. The child may or may not have demonstrable tuberculosis.

Krause⁵ stated:

"Cutaneous hypersensitiveness varies directly with the extent and intensity of the disease, just as it increases with progressive disease, diminishes with the healing of the disease and is increased by reinfection."

A negative test is exceedingly valuable information and means that the child has no tuberculous infection with few exceptions. For a period of a few weeks following measles, whooping cough, influenza and perhaps some other acute diseases, there is supposed to be a suppression of tissue allergy and the test should be repeated later before tuberculous infection can be ruled out. Also in advance tuberculosis the resistance is so overwhelmed that the test may be negative.

As shown below out of 294 white children between the ages of six and twelve given the intracutaneous test 95 or 32.32 per cent were positive. This compares favorably with results obtained by other men. Out of 22,550 white school children in North Carolina, Doctor McCain⁶ found 22.07 per cent reacting positively. My percentage runs higher because my patients were from the tuberculosis clinic and the majority were contacts or suspicious cases. The percentage positive at Bellevue Hospital same age group was 31.26 per cent. The percentage always runs higher in crowded cities like New York than it does in rural sections. Of the contact cases, 85 or 40.66 per cent were positive while in the non-contact cases only 10 or 11.76 per cent were positive. The percentage running three and one-half times higher in contacts than in non-contacts.

The⁷ analysis of the examination of 25,000 Massachusetts school children shows that four times as many cases of childhood type of tuberculosis and twice as many cases of the adult type of tuberculosis were found in children said to have been exposed to a case of pulmonary tuberculosis, as among children not so exposed. Opie and McPhedran found seven times as many, and Rathbun found nine times as many cases of disease in children who had a history of exposure to a case of pulmonary tuberculosis. Probably if a more careful history had been taken some of the cases marked as contacts would have been found to have had no contact with active tuberculosis and my percentage of cases of tuberculosis would have been higher among contact children than the above figures indicate. This shows the value of a contact history.

Conclusions

1. Thorough general physical and laboratory examinations should be done for the elimination of other causative factors of symptoms.

2. A positive tuberculin test is valuable in the diagnosis of tuberculosis in children in that a tuberculous infection can be detected before it shows up by roentgenogram as it takes from two to three years for the glands to become calcified and to be visualized by roentgen ray.

3. A negative test is most valuable in that it rules out tuberculosis with few exceptions and hence we may look for other causes of the suspicious symptoms or physical and roentgen signs.

4. Roentgen evidence of tracheobronchial lesions is not sufficient for a diagnosis without a positive tuberculin test and suspicious symptoms.

5. The value of a contact history is shown by the high percentage of positive cases in contacts.

Summary of 294 Tuberculin Tests

	No. of Cases		Percentages	
	Pos.	Neg.	Pos.	Neg.
Contact Cases	85	124	40.66	59.34
Non-Contact Cases ..	10	75	11.76	88.24
Total	95	199	32.32	67.68

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GEORGIA INDUSTRY

Georgia is known as an agricultural State, but despite her importance in that respect we must not lose sight of the fact that, at least from a statistical standpoint, industry is just as important, if not more so. In 1929 the 4,178 manufacturing establishments in Georgia supported over 170,000 employees and paid them in salaries and wages approximately \$140,000,000. Products to the value of \$718,602,596 were produced and were marketed in every State and in practically every commercially important country of the world. A few Georgia cities ranked in order of their importance from an industrial output standpoint are: Atlanta, Columbus, Macon, Augusta, LaGrange, and Savannah, each having an annual output in excess of \$14,000,000. Atlanta's output was valued at \$137,000,000. These figures were taken from the Biennial Census of Manufactures from which may be obtained detailed information regarding the production of any commercially important product. A circular containing a summary for Georgia may be obtained free upon request.

—U. S. Dept. of Commerce, Nov. 20, 1931.

According to a recent statement by the United States Public Health Service, one of the reasons why so many people die of cancer lies in the fact that the disease usually exists for some time before it is recognized and treated.

CANCER*

Chapter VII

J. L. CAMPBELL,† M.D.
Atlanta

It would be impossible to record all of the "cures" that have been advocated for the relief of cancer. There has averaged a new one about once a week for the past 25 years. And still they come—only to be discarded: some to oblivion and others to the waste basket, later to be revived under a new name or by a new advocate. The unscrupulous promoter takes advantage of the victim of any disease that has been considered incurable to exploit a "sure cure" and, strange as it may seem, many people are persuaded to give testimonials stating they have been "cured", simply because they are boosted up by a stimulant or some course of treatment that is recommended by a good salesman who abuses surgery.

In the early days of intravenous medication a doctor reaped a rich harvest from victims of cancer by using an ointment together with some arsenical preparation injected into the veins. His fees were collected in advance and his patients signed a shrewdly written contract that became void when they refused any step of the "treatment," which they usually did as soon as it was evident they were not being benefited. He did not have his diagnosis confirmed by microscopic examinations; those who were "cured" did not have cancer.

Some time ago Blair Bell, of Liverpool, England, developed a treatment of a suspension of colloidal lead. It was used on a group of robust dock hands with apparent benefit to them. Scientific men from all parts of the world flocked to Doctor Bell's clinic, but further research proved that the balance between the curative and poisonous dose was too delicate and the treatment had to be abandoned. Colloidal gold has been used to some extent in a Chicago clinic, but it, too, caused a terrific reaction in so many cases that it has almost been discontinued.

Glandular extracts, from which much was expected, have not proven to be successful. Bacterial products and other foreign proteid materials have apparently benefited some patients, but no real cures have withstood the scientific test of time.

A "sure cure for cancer" will probably never be developed because the nature of the

condition is such that one remedy is not applicable to all forms. A cancer on the face of an old person can nearly always be cured by one of several remedies. A skin cancer in another part of the body will not yield to the same treatment. A cancer of the breast may be cured if removed early; there are hundreds of women perfectly well who have had cancer of the breast properly treated.

The real cure for cancer is wholehearted co-operation between doctor and patient. In Pennsylvania, it was found that a large number of the doctors who never read medical journals and never attended scientific medical meetings were responsible for most of the cancer deaths because they were not prepared to make an early diagnosis and give prompt and effective treatment. On the other hand, it was found that people who were told that they had a suspicious lesion delayed to take the doctor's advice and institute proper treatment. This would apply to any state in the Union. Because it does not cause pain people are often unaware that they have anything like a cancer.

Finally—Hear the conclusion of the whole matter: Select a medical adviser, tell him of any deviation from the normal in your feelings, and (even though there is nothing apparent) spend the time to have a thorough examination once or twice a year, and oftener, if anything outside the normal occurs.

Properly treated early cancer can be cured in the vast majority of cases. Late cancers are never cured. If you have a cancer, do not delay treatment. There are only two methods that offer any hope: surgery, applicable in certain cases; radiation, in others. In many, both should be used.

CIRCULATION IN PYREXIA

H. C. Bazett, Philadelphia (*Jour. A. M. A.*, Oct. 31, 1931), points out that studies of the circulation in fever both in animals and man have been inadequate, and he expresses the hope that a more systematic study may be possible. For such studies the present methods of blood pressure measurement must be improved, and a greater capacity of analysis must be developed, since the respiratory methods of measuring circulation rate are unlikely to be adaptable to these cases. By improved technic in measuring blood pressure, by a study of the character of the pulse wave, by consideration of the complexities introduced by end and lateral pressure heads, and by careful standardization of any calculations through comparison with circulation rate measurements of the respiratory type, it may ultimately prove possible to unravel the complexities of the circulatory changes in such patients by the use of relatively simple technical methods.

*This is the last of a series of seven articles on the cancer problem in its relation to public health written by Doctor Campbell at the request of the Georgia State Board of Health. Preceding articles have been published in the *Journal*.

†Chairman of the Cancer Commission of the Association.

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA
Devoted to Welfare of Medical Association of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

DECEMBER, 1931

THE SEASON'S GREETINGS

A Merry Christmas and a Happy and Prosperous New Year is our prayer for all members of the Medical Association of Georgia and their families.

PROGRESS OF THE ASSOCIATION

MEMBERSHIP

At the Atlanta Session of the Association in May, we had 1474 members in good standing. On December first we had 1627. At the time of going to press with this issue of the Journal, December fifteenth, we have 1,659 members in good standing—a gain of 185 in the past seven months. These figures show the loyalty and devotion of our members. "The Association serves its membership."

DIRECTORY

As has been customary during the past several years this issue of the Journal contains the Directory for 1931. No effort has been spared to make this the most nearly correct and complete Directory ever published by the Association. The names and addresses of members are listed under the county societies. The names of all members and officers are published from lists received from the secretaries of the county societies, to whom galley proofs were sent in ample time for corrections and return before publication, thus insuring as great a degree of accuracy as is possible in the central office. If any errors or omissions are noted the Secretary-Treasurer will appreciate a prompt notice to this effect.

FINANCIAL STATUS

On December first, 1930, the Association had a balance of \$1,339.33 in the bank and on December first, 1931, \$3,109.42—a gain of \$1770.09, all current bills being paid in both instances. This has been achieved notwithstanding a decided decrease in income from the Journal on account of less advertising. Every possible economy has been practiced which has been consistent with carrying out the activities of the Association. The

Journal has maintained its strict policy of accepting only advertisements of those products approved by the Council on Pharmacy and Chemistry of the American Medical Association.

HISTORY

Considerable progress has been made on "A History of Medicine in Georgia" being written under the direction of the Association. The History Committee is anxious to include a short sketch of the practice of medicine in every county in the State and many of the counties have complied with our request for necessary information. The work is being delayed because of the lack of response from many of those to whom we have written. Let us get together in this project as we have in all the others and thereby facilitate the work of those striving for a correct and interesting history of medicine in Georgia.

The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contridution in some other medical periodical to submit an abstract of the article for these columns.

SUITS FOR ALLEGED MALPRACTICE

There has been a slight decrease in the number of suits for alleged malpractice against members of the Association. As has been repeatedly pointed out by the Chairman of our Committee on Medical Defense a great majority of these have been caused by ill advised remarks of one member about the work of another. Real negligence on the part of those who have been sued has been almost entirely absent, they being innocent victims and deserving the support of the Association.

OUR NEXT ANNUAL SESSION

The next Annual Session of the Association will be held in Savannah, May 17, 18, 19, 20, 1932. The date was changed by the Council on account of a conflict with the Session of the American Medical Association which will be held, May 9-13, 1932. Our hosts will be the Georgia Medical Society of Savannah and its Auxiliary. Nothing need be said of what is awaiting us in May since all of us have been the happy recipients of the gracious hospitality of the doctors of Savannah and their charming wives.

THE PINK SLIP

For your convenience we are enclosing in this issue of the Journal a pink slip that we ask you to fill out promptly in payment of 1932 dues and forward to the Secretary of your county society.

NEW ORLEANS SESSION, SOUTHERN MEDICAL ASSOCIATION

At the twenty-fifth Annual Session of the Southern Medical Association held in New Orleans November 18-20, the Medical Association of Georgia was well represented on both the scientific exhibits and the scientific program. Those participating in the scientific exhibits were:

The Good Samaritan Clinic, Dr. Chas. E. Boynton, Medical Director, and Dr. J. K. Fancher, Assistant Medical Director, Atlanta, Ga.: Photographs exhibiting diseases of the ductless glands.

Dr. Mark S. Dougherty, Jr.; Drs. Bunce, Landham and Klugh, Atlanta, Ga.: Toxemias produced by the derivatives of barbituric acid.

Dr. E. A. Bancker, Jr.; Drs. Bunce, Landham and Klugh, Atlanta, Ga.: Cardiac necropsies in private practice.

Dr. Howard Hailey, Atlanta, Ga.: Dermatitis artefacta and furunculosis artefacta.

Dr. J. W. Jones and Dr. H. S. Alden, Atlanta, Ga.

Dr. William Willis Anderson, Emory University, Atlanta, Ga.: Photographs showing clinical conditions in children.

Dr. Harold M. Bowcock, Emory University, Atlanta, Ga.: Unusual pictures of blood diseases.

Dr. Jack C. Norris, Emory University, Atlanta, Ga.: Pathogenic yeasts and fungi—bacteriology, pathology, and treatment.

Dr. Roy R. Kracke, Emory University, Atlanta, Ga.: Studies in etiology, bacteriology and pathology of granulocytopenia (agranulocytosis) with classification and case reports.

The Medical Association of Georgia is highly gratified to know that Dr. Roy R. Kracke won the second award for his excellent exhibit on agranulocytosis.

At the General Clinical meeting on Wednesday Dr. C. C. Aven presented a paper on

"Birth Control and the Medical Profession" and Dr. J. R. McCord presented a treatise on "Prenatal Care".

In the Section on Medicine Dr. W. R. Houston delivered the Chairman's Address: "Our Coldness in General Practice to Psychotherapy" and Dr. S. R. Roberts presented a paper on "Personality Pathology".

In the Section on Pediatrics Dr. Lee Bivings read a paper on "Eczema in Infancy and Childhood" and Dr. Benjamin Bashinski read a paper on "Obscure Temperature".

In the Section on Pathology, Dr. E. A. Bancker, Jr. read a paper on "Postmortems in Private Practice, with Particular Reference to the Diagnosis and Treatment of Heart Disease", and Dr. Roy R. Kracke, "Thrombopenic Granulocytopenia".

In the Section on Neurology and Psychiatry, Dr. Mark S. Dougherty, Jr., read a paper on "Toxic Reactions Produced by the Derivatives of Barbituric Acid" and Dr. E. F. Fincher, "Cerebral Vascular Lesions Disclosed at Operation".

In the Section on Radiology, Dr. Robert Drane read a paper on "Bone Changes in Lead Poisoning".

In the Section on Dermatology and Syphilology, Dr. Howard Hailey read a paper on "Ganglion: X-Ray Study and Treatment".

In the Section on Gynecology, Dr. B. T. Beasley read a paper on "Chorio-Epithelioma and Hydatidiform Mole: Report of Four Cases" and Dr. J. R. McCord, "The Obstetric Morbidity and Mortality in the United States Today".

In the Section on Urology, Drs. Earl H. Floyd and J. L. Pittman read a paper on "Rupture of the Kidney".

In the Section on Railway Surgery Dr. F. K. Boland read a paper on "Treatment of Empyema by the Open Method".

In the Section on Ophthalmology and Otolaryngology, Dr. Dunbar Roy read a paper on "Some Practical Points in Refraction Based on the Histories of Eighteen Thousand Cases".

Before the American Society of Tropical Medicine Dr. J. C. Norris presented a paper on "Further Observations on Pathogenic Yeasts".

In the Section on Medical Education, Dr.

Russell H. Oppenheimer delivered the Chairman's Address on "The Curriculum".

Dr. L. J. Moorman of Oklahoma City, was elected President for the ensuing year. The next annual session will be held in Birmingham next fall.

ELEVENTH DISTRICT MEETING

The Eleventh District Medical Society met at Homerville, Tuesday, October 13, 1931.

Meeting called to order—Dr. E. L. Jelks, President, Quitman.

Invocation—Rev. C. L. Nease, Homerville.

Welcome Address—James M. Towery, Mayor, Homerville.

Response—Dr. B. H. Minchew, Waycross.

Scientific Program.

1. Ionization in Chronic Otitis—Dr. J. P. Harrell, Brunswick.

Discussion—Doctors Fort and Harrell.

2. Spinal Anesthesia with Illustrations—Dr. A. F. Saunders, Valdosta.

Symposium 3-4-5-6.

3. Average Standards in Pre-Natal Care—Dr. R. S. Burford and Dr. J. W. Simmons, Brunswick.

4. Some Cardinal Points of Interest in Every Day Obstetrics—Dr. C. A. Witmer, Waycross.

5. Care of New Born Baby—Dr. C. M. Stephens, Waycross.

6. Spinal Anesthesia in Obstetrical Surgery—Dr. W. M. Folks, Waycross.

Discussed by Drs. Tolleson, Penland, Hafford, Huey, Simmons, Folks, Witmer, Louis Smith, R. S. Burford, and Stephens.

7. Presentation of Case of Trachoma—Dr. B. H. Minchew, Waycross.

8. Syphilis in Private Practice—Dr. A. F. Caldwell, Atlanta.

Discussion—Doctors Minchew, McMichael, Williams, Reavis, Hafford, and Caldwell.

9. Report on Legislation, Etc.—Dr. A. G. Fort, Atlanta, President Medical Association of Georgia.

Business Session—Dr. T. H. Clarke was elected President; Dr. S. C. Jones, Vice-President; Dr. W. F. Reavis, Secretary-Treasurer. Brunswick was selected as next meeting place.

Dinner at Hotel Musgrove—Guests of Dr. H. G. Huey, at 7:00 p. m.

W. F. REAVIS, M.D.,
Secretary.

HONOR ROLL FOR 1932

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 5, 1931.

Eighty-third annual session of the Association will be held at Savannah, May 17, 18, 19, 20, 1932.

The U. S. Civil Service Commission announces examinations for "Social Worker" (Psychiatric) and "Junior Social Worker".

COUNTIES REPORTING FOR 1932

Tift County Medical Society

The Tift County Medical Society announces the following officers for 1932:

President—W. H. Hendricks, Tifton.

Vice-President—D. B. Harrell, Tifton.

Secretary-Treasurer—Carlton A. Fleming, Tifton.

Delegate—D. B. Harrell, Tifton.

Alternate Delegate—C. S. Pittman, Tifton.

Randolph County Medical Society

The Randolph County Medical Society announces the following officers for 1932:

President—T. F. Harper, Coleman.

Vice-President—W. W. Crook, Cuthbert.

Secretary-Treasurer—G. Y. Moore, Cuthbert.

Delegate—Loren Gary, Georgetown.

Macon Medical Society

(Bibb County)

The Macon Medical Society announces the following officers for 1932:

President—James A. Fountain, Macon.

Vice-President—W. A. Newman, Macon.

Secretary-Treasurer—W. W. Chrisman, Macon.

Delegate—O. H. Weaver, Macon.

Delegate—J. B. Kay, Byron.

Habersham County Medical Society

The Habersham County Medical Society announces the following officers for 1932:

President—M. F. Haygood, Alto.

Vice-President—O. N. Harden, Cornelia.

Secretary-Treasurer—W. H. Garrison, Clarksville.

Delegate—E. H. Lamb, Cornelia.

Alternate Delegate—O. N. Harden, Cornelia.

Ware County Medical Society

The Ware County Medical Society announces the following officers for 1932:

President—G. E. Atwood, Waycross.

Vice-President—C. A. Witmer, Waycross.

Secretary-Treasurer—K. McCullough, Waycross.

Delegate—J. E. Penland, Waycross.

Burke County Medical Society

The Burke County Medical Society announces the following officers for 1932:

President—W. W. Hillis, Sardis.

Vice-President—J. M. Byne, Sr., Waynesboro.

Secretary-Treasurer—J. M. Byne, Jr., Waynesboro.

Delegate—W. C. McCarver, Vidette.

Alternate Delegate—J. M. Byne, Sr., Waynesboro.

Muscogee County Medical Society

The Muscogee County Medical Society announces the following officers for 1932:

President—Frank P. Norman, Columbus.

Vice-President—John Bush, Columbus.

Secretary-Treasurer—Willis P. Jordan, Columbus.

Delegate—C. Amory Dexter, Columbus.

Alternate Delegate—Hugh J. Bickerstaff, Columbus.

GEORGIA STATE NURSES ASSOCIATION

Officers

President—Miss Alice F. Stewart, R. N., Augusta.
 First Vice-President—Miss Dora A. Kershner, R. N., Macon.
 Second Vice-President—Miss Lillian Cumbee, R. N., Emory University.
 Secretary—Miss Florence Pund, R. N., Augusta.
 Treasurer—Miss Jane Van De Vrede, R. N., Atlanta.
 Miss Jane Van De Vrede, R. N.
 Executive Secretary

District Presidents

First—Mrs. Dorothy Treacle, R. N., Savannah.
 Second—Mrs. B. Y. Vann, R. N., Thomasville.
 Fourth—Miss Lucia Massee, R. N., Cuthbert.
 Fifth—Mrs. Sue B. Paille, R. N., Atlanta.
 Sixth—Mrs. Sarah P. English, R. N., Sandersville.
 Seventh—Miss Shirley Hamrick, R. N., Cedartown.
 Eighth—Miss Lynda Bray, R. N., Athens.
 Ninth—Miss Ruby Falls, R. N., Gainesville.
 Tenth—Mrs. Olive Barbin, R. N., Augusta.

Headquarters

131 Forrest Avenue, N. E., Atlanta.

NURSES NEED PATIENTS!

A more equable distribution of nursing service to patients, both in homes and in institutions, through various measures including employment of graduates on staff basis by hospitals, through hourly appointment service, through specialization, etc., was advocated at the convention of the Georgia State Nurses' Association, in Savannah, Oct. 26-28.

The imperative need for wider distribution on a more satisfactory basis is known, nevertheless, for various reasons, the services of a large number of graduate nurses in Georgia have not been made available to patients, many of whom are not financially able to secure special duty nurses on the individual "free lance" plan which has been in existence for many years and which has proven so inadequate in the emergent situation.

It is believed that practical organization and administration through the various channels providing nursing service will help very largely to solve the difficult problem of supplying efficient, graduate service to the public at reasonable cost; and at the same time will do much to relieve a serious unemployment situation existing among nurses in this state.

Concentration upon practical means for putting such organization into effect is now a matter to be seriously considered by nurses, doctors, hospitals, registries and all engaged in distributing nursing service.

For a number of years there has been an overproduction of nurses in this country due to a pernicious system for which no one in particular has been responsible, but from which thousands of nurses are suffering. While a few schools have realized the necessity of affording nurses instruction to meet everchanging needs, very many other hospitals have trained nurses without any thought of actual nursing needs, nor where the system would lead in the light of the future of nurses and nursing. It is sound economically and professionally not to produce more

nurses than can be distributed over a reasonable period of time. Since we have done so, immediate steps should be taken to counteract the situation by using the service available.

It is believed this can be accomplished in a way which will be satisfactory to patients, doctors, nurses, and hospitals. Reorganization of nursing service is necessary and is going to call for leadership and study in each community. Those involved must make plans for the setting in motion of "machinery" which will be effective.

In hospitals this means the adoption by degrees of graduate nurses on staff basis. In the present time of depression an unusual opportunity is presented to inaugurate the highest type of nursing service. The service of the graduate nurse should be basic in all hospitals, and where schools of nursing are maintained, students should supplement this service. Large schools should immediately reduce their student personnel.

As to registries, perhaps even greater opportunity is now offered for expansion of service, both to the public and the nurse. The registry is the logical center of distribution of nursing service, whether it be under the auspices of the nurses' organization, of the community or of the hospital. And in any place where there is a hospital, there is a center to begin distributing nursing service on a bigger and better basis than at present. The nurses' official registry already has an ideal skeleton organization which can be employed to this end. Registries must be something more than institutions which supply nurses upon call. They can be made bureaus of nursing service for the entire community if a program of expansion is adopted and carried out.

Nurses are working zealously to improve conditions. They cannot do so without the hearty cooperation and participation of physicians and hospital authorities, and of all distributing forces, as well as the public.

WOMAN'S AUXILIARY

MEDICAL ASSOCIATION OF GEORGIA

OFFICERS

President Mrs. Ralston Lattimore, Savannah
 President-Elect Mrs. S. T. R. Revell, Louisville
 1st Vice-President Mrs. J. Bonar White, Atlanta
 2nd Vice-President Mrs. C. B. Almond, Winder
 3rd Vice-Pres., Mrs. D. N. Thompson, Elberton

Recording Secy. Mrs. J. E. Penland, Waycross
 Cor. Secretary, Mrs. Wm. R. Dancy, Savannah
 Treasurer Mrs. Ben Bashinski, Macon
 Parliamentarian Mrs. Allen H. Bunce, Atlanta
 Editor Mrs. G. H. Johnson, Savannah

COMMITTEES

Health Education

Mrs. Bonar White, Atlanta, Chairman
 Mrs. V. H. Bassett, Savannah
 Mrs. Robert Pendergrass, Americus
 Mrs. R. S. O'Neal, LaGrange
 Mrs. C. H. Richardson, Macon
 Mrs. H. M. Fullilove, Athens
 Mrs. C. L. Ayers, Toccoa
 Mrs. James B. Dillard, Davisboro
 Mrs. W. M. Folks, Waycross
 Mrs. A. T. Coleman, Dublin
 Mrs. Nichols Peterson, Tifton

Health Films

Mrs. J. A. Selden, Macon, Chairman
 Mrs. Bonar White, Atlanta
 Mrs. C. W. Roberts, Atlanta
 Mrs. Rufus E. Graham, Savannah
 Mrs. R. C. Pendergrass, Americus
 Mrs. J. H. Downey, Gainesville

Public Policy and Legislation

Mrs. Julian Quattlebaum, Savannah, Chairman
 Mrs. E. B. Anderson, Americus
 Mrs. R. L. Kennedy, Metter
 Mrs. Dan Y. Sage, Atlanta
 Mrs. W. A. Selman, Atlanta
 Mrs. Charles C. Hinton, Macon
 Mrs. Y. H. Yarbrough, Milledgeville
 Mrs. J. E. Mercer, Vidalia
 Mrs. N. Peterson, Tifton
 Mrs. M. M. Byrd, West Point
 Mrs. B. C. Teasley, Hartwell
 Mrs. C. L. Ayers, Toccoa
 Mrs. W. M. Folks, Waycross

Students' Loan Fund

Mrs. William Shearouse, Savannah, Chairman

Three-Year Term

Mrs. Gordon Chason, Bainbridge
 Mrs. M. M. Byrd, West Point
 Mrs. J. E. Penland, Waycross

Two-Year Term

Mrs. Lee Howard, Savannah
 Mrs. Marion Benson, Atlanta
 Mrs. J. L. King, Macon
 Mrs. W. J. Cranston, Augusta

One-Year Term

Mrs. G. Y. Moore, Cuthbert
 Mrs. Stewart Brown, Royston
 Mrs. C. L. Ayers, Toccoa
 Mrs. E. B. Claxton, Dublin

Chairman of Organization—Mrs. S. T. R. Revell, Louisville

Chairman of Scrap Book—Mrs. D. N. Thompson, Elberton

Chairman of Hygeia—Mrs. C. B. Almond, Winder

Delegates to the A. M. A. Auxiliary

Mrs. Allen Bunce, Atlanta
 Mrs. Bonar White, Atlanta
 Mrs. James N. Brawner, Atlanta
 Mrs. Paul Holliday, Athens
 Mrs. J. C. McAfee, Macon
 Mrs. Marion Pruitt, Atlanta, Alternate

Delegates to the S. M. A. Auxiliary

Mrs. Allen H. Bunce, Atlanta
 Mrs. Bonar White, Atlanta

Alternates

Mrs. Lee Bivings, Atlanta
 Mrs. V. H. Bassett, Savannah

The eighth annual session of the Woman's Auxiliary to the Medical Association of Georgia will be held in Savannah, May 17, 18, 19, 20, 1932.

District Managers

First District—Mrs. L. F. Lanier, Sylvania, Ga.

Second District—Mrs. Nichols Peterson, Tifton, Ga.

Third District—Mrs. Herschel Smith, Americus, Ga.

Fourth District—Mrs. Enoch Callaway, LaGrange, Ga.

Fifth District—Mrs. Dan Y. Sage, Atlanta, Ga.

Sixth District—Mrs. Wallace Bazemore, Macon, Ga.

Seventh District—Vacant.

Eighth District—Mrs. B. C. Teasley, Hartwell, Ga.

Ninth District—Mrs. C. L. Ayers, Toccoa, Ga.

Tenth District—Mrs. James B. Dilliard, Davisboro, Ga.

Eleventh District—Mrs. Wm. Folks, Waycross, Ga.

Twelfth District—Mrs. C. W. Findley, Vidalia, Ga.

HEALTH EDUCATION

In September letters were sent to the district co-chairman of Health Education asking them to have their county auxiliaries arrange a Health Education "Program-Tea" for the women's organizations in their counties.

Will those who have had such programs please send their reports to Mrs. J. Bonar White, 769 Penn Avenue, N. E., Atlanta.

Where this has not been done, it is earnestly requested that arrangements be made at once.

HEALTH FILMS

The Metropolitan Life Insurance Co. has offered to Mrs. Bonar White, (State Chairman of Health Education), 12 sets of film strips (size 35 mm), free of charge, for use in the 12 districts. They can be shown on such machines as the Spencer Lens Delineascope, Bausch and Lomb, or Brayco & S.V.E. Picturol. It is hoped that county auxiliaries will avail themselves of this opportunity for health education and disease prevention.

Among the subjects listed are: "How to Live Long," "No More Diphtheria," "Lives of Trudeau, Pasteur, Reed, Nightingale". The *lives* are based on a series of Health Hero Pamphlets, that are very suitable for high school and adults audiences. For further information apply to Mrs. Bonar White, Atlanta.

MRS. PENLAND AND MRS. McCULLOUGH ENTERTAIN MEDICAL AUXILIARY

The Ware County Medical Auxiliary was entertained by Mrs. J. E. Penland and Mrs. Kenneth McCullough, Waycross, at its October meeting.

The members assembled in the dining-room at Phelps' Place which was decorated with fall flowers.

During the business session presided over by the President, Mrs. C. A. Whitmer, a report of the State Convention held in Atlanta, was given by the delegate, Mrs. Penland, and plans were made for a benefit bridge party to be given this month, the proceeds to be used for the Students' Educational Fund.

Mrs. J. E. Penland, President of the Eleventh District Auxiliary to the Medical Society presented plans for the district meeting to be held in Homerville on Tuesday, October 13th.

While a social hour was enjoyed, a tempting salad course was served.

Fifteen members were in attendance.

MEDICAL AUXILIARY

Perfects Plans for Card Party at Meeting Yesterday

The Woman's Auxiliary to the Georgia Medical Society held its November meeting yesterday afternoon at the home of Mrs. O. W. Schwalb, with Mrs. E. C. Demmond as joint hostess.

Final plans were made for the card party which the Auxiliary will give Friday afternoon and evening of

next week at the Hotel Savannah, and it was announced that a number of tables have already been reserved. The Auxiliary decided to sell Christmas cards for the benefit of the education loan fund, and in response to a request the members will collect used clothing to be given for the benefit of the unemployed. A letter was read from Mrs. Ralston Lattimore, the State President of the Auxiliary asking that all chairmen send reports to her promptly, particularly those of the magazine chairmen.

The following nomination committee was appointed to present a ticket at the next meeting, Mrs. C. G. Redmond, Mrs. H. H. McGee, Jr., and Mrs. Dancy. Mrs. Victor Bassett read a paper on "Health" which had been written by Mrs. Bonar White, of Atlanta. Miss Vera Dodge played two delightful violin numbers. She was accompanied by Mrs. J. H. Batchelor.

Mrs. Hugo Johnson will be the hostess for the January meeting with Mrs. Rufus Graham as joint hostess.

After the meeting a social hour was enjoyed.

—Savannah Morning News.

Savannah, Ga., Nov. 7, 1931.

COMMUNICATIONS

To the Editor:

Your letter came today, and I was so glad to hear from you. I am doing all in my power to push "Hygeia". Everyone writes how hard it is to get a subscription, and of course I realize that we are laboring under difficulties this year and will have to work harder than ever to secure subscriptions. I have suggested to the smaller auxiliaries that by working "Hygeia" they could get money to send to the Student Loan Fund; and if they fail in annual subscriptions, to solicit semi-annual subscriptions. In this way I think perhaps we can increase our *total* number. We are trying to make enough to present "Hygeia" to our libraries here. We can't hope to secure many from our teachers as their salaries have been reduced.

We have arranged with a local florist to give us a small commission on her chrysanthemums. She has beautiful white Turners and pink Turners at \$2.50 per dozen, and Betty Ross (white) at \$2.00; Golden Wedding (a beautiful ball of yellow), at \$2.25 per dozen, and a beautiful shell pink (Louise Hopeton), at \$1.75; also an exceedingly large white "Queen" at \$2.75 per dozen. I thought perhaps you might get a few orders for us from your friends who love chrysanthemums. A member of our Auxiliary will inspect each order, and see that you get choice flowers. They will be sent C. O. D. and you may inspect them, too. If you get as many as three dozen we will pay postage and insurance.

I enjoyed your paper so much, but really was disappointed that you could not be with us at our Ninth District meeting at Tate. We had a very interesting meeting, good attendance, nice luncheon, and the scenery was beautiful.

I hope for you a successful year and if you have

time to call some of your friends we would appreciate an order.

Sincerely,

MRS. C. B. ALMOND,

November 2, 1931.

310 Candler Street, Winder.

Editor's Note: The determined spirit of the Winder Auxiliary is certainly worthy of note. Can't we all help them?

HEALTH EDUCATION PROGRAM

Mrs. J. Bonar White, Atlanta, President of the Auxiliary, entertained at tea the members of the Fulton County Auxiliary, officers of all the Parent-Teacher Association organizations, and presidents of all Women's Clubs in Atlanta at the Academy of Medicine on October 7th.

The program was planned by the hostess to promote better health work and cooperation between the Auxiliary and Women's Clubs in the city.

Mrs. White outlined the purpose of the entertainment and introduced Dr. T. C. Davison, President of the Fulton County Medical Society. Doctor Davison introduced Dr. L. G. Baggett, Atlanta, who addressed the guests on "What Women Can Do for Public Health".

Health Films were shown.

Mrs. Hulett H. Askew, Mrs. Dan Y. Sage, Mrs. B. L. Shackelford, and Mrs. Thomas J. Collier, all of Atlanta, were on the entertainment committee and assisted in receiving the guests.

NEWS ITEMS

Dr. B. F. Akin, formerly of Jenkinsburg, has removed to Jackson.

The Randolph County Medical Society met at Cuthbert on November 5th. Dr. E. C. McCurdy, Shellman, and Dr. J. C. Patterson, Cuthbert, read papers. Dr. T. F. Harper, Coleman, gave a case report.

The staff of St. Joseph's Infirmary held its regular meeting on October 27th. The scientific meeting was devoted to a discussion of mortalities.

Dr. Carlton A. Fleming, Tifton, Secretary-Treasurer of the Tift County Medical Society, was the first to report the election of officers for 1932, as follows: Dr. William H. Hendricks, Tifton, President; Dr. David B. Harrell, Tifton, Vice-President; Dr. Carlton A. Fleming, Tifton, Secretary-Treasurer; Dr. David B. Harrell, Tifton, Delegate; Dr. Carl S. Pittman, Tifton, Alternate Delegate.

The American Board of Otolaryngology will hold an examination in New Orleans on May 9th, during the meeting of the American Medical Association. Prospective applicants for certificates should address the Secretary, Dr. W. P. Wherry, 1500 Medical Arts Building, Omaha, Neb., for proper application blanks.

The Millen Hospital, Millen, is in receipt of notice from the American College of Surgeons that it has been placed on the accredited list of hospitals.

The Spalding County Medical Society met at the Strickland Memorial Hospital, Griffin, on October 20th.

The Richmond County Medical Society met at the University Hospital, Augusta, on October 15th.

The Georgia Medical Society (Chatham County) met at the Medical Society Hall on October 27th. Dr. M. J. Epting, Savannah, read a paper entitled "Cystic Diseases of the Kidneys"; Dr. Lawrence Lee, Savannah, "Apelectasis of the Lung"; Dr. Henry L. Levington, Savannah, "Obstruction of the Ureter by Fractured Kidney Stone".

The American College of Physicians will hold its Sixteenth Annual Clinical Session in San Francisco, Calif., April 4-8, 1932. The Palace Hotel will be headquarters where the general scientific meetings will be held. Clinics will be conducted in various hospitals and institutions in San Francisco.

Dr. and Mrs. J. H. McClure, Cornelia, entertained the members of the Habersham County Medical Society and Woman's Auxiliary, in their home at the regular October meeting of the society.

Dr. William H. Trimble announces the opening of offices in Suite 1110 Doctors Building, 478 Peachtree Street, N.E., Atlanta. Practice limited to internal medicine.

Dr. E. Y. Walker announces the removal of his offices to Suite 719 Doctors Building, 478 Peachtree Street, N.E., Atlanta. Practice limited to obstetrics and gynecology.

Dr. William Nevin Adkins announces that he has resumed practice with offices at 157 Forrest Avenue, N.E., Atlanta.

The McCall Hospital, Rome, announces the formal opening of the new nurses' home on October 31st. The owners of the hospital and nurses' home, Dr. J. T. McCall and Dr. J. N. Cheney, were recipients of much admiration and favorable comment by the friends of the institution who called to pay their respects. A local interior decorator fashioned all the draperies and decorated the home for the opening. Mrs. J. T. McCall, Mrs. Claude Taylor, Mrs. Joe Daniel, Miss Nell Chastain, Mrs. Annie L. Smith, Miss Frances Rutland, and Miss Nell Sloan, assisted by eighteen student nurses were official hostesses. Refreshments were served.

The Southeastern Surgical Congress will hold its third annual assembly at the Tutwiler Hotel, Birmingham, Ala., March 7, 8, 1932.

Dr. Michael Hoke, Atlanta, has accepted the appointment as chief orthopedist at the Georgia Warm Springs Foundation, Inc., Warm Springs.

The Third District Medical Society met at Cordele on November 12th. The following titles of scientific papers were on the program: "Diphtheria," Dr. H. J.

Williams, Cordele; "Sarcoma of the Testicle", Dr. E. B. Anderson, Americus; "Consideration of the Patient Who Needs Two Operations, One a Thyroidectomy", Dr. Warren A. Coleman, Eastman; Obstetrics with a Country Doctor", Dr. Lucius Lamar Dawson, "Obstetrics", Dr. Carl P. Savage, Montezuma; "Tularemia", Dr. P. L. Williams, Cordele. Report of Councilor. Dr. J. C. Patterson, Cuthbert.

The American Public Health Association, 370 Seventh Avenue, New York City, has maintained a Health Education Service for several years which provides ready made material for bulletins, newspaper articles and for other purposes. A recent addition to this service promises to be of real interest and value to those whose publicity funds are running low. A new photographic process has made possible the transfer of pictures and text to the fiber stencils which are used on duplicating machines. The reproduction of complicated drawings is remarkable and provides an opportunity for the illustration of mimeographed bulletins.

The United States Public Health Service announces that the Public Health Service milk program has now been in existence for a period of eight years. During that interval 444 American municipalities, located in twenty-five States, have adopted the program in a coordinated attempt to improve and unify milk control methods in this country. The 1931 edition of the Public Health Service Milk Ordinance and Code, which is the nucleus around which the program is built, has now been approved by the Bureau of Dairy Industry of the United States Department of Agriculture. Therefore it may be stated that rapid progress is being made toward the ideal of a practically nation-wide adoption of one uniform milk-control program.

The Fulton County Medical Society met at the Academy of Medicine, Atlanta, on November 19th. Dr. A. O. Linch, Atlanta, gave a case report on "An Acute Dilatation and Rupture of the Stomach Following Ingestion of Cabbage"; Dr. S. H. Shippey, Atlanta, gave a clinical talk on "The Clinical Significance of Achlorhydria"; Dr. E. D. Colvin, Atlanta, read a paper entitled "An Analysis of the Abdominal Cesarean Sections Performed in Atlanta from 1925 to 1930". The papers were discussed by Drs. R. A. Bartholomew, O. H. Matthews, and W. F. Shallenberger.

Dr. H. M. Tolleson, Hahira, entertained the members of the Lowndes County Medical Society at a barbecue dinner on November 10th. Visiting physicians from other counties were present. The scientific program consisted of the following titles for papers: "The Relation of Gallbladder Disease to Angina Pectoris," Dr. W. W. Turner, Nashville; "Matin Sleep," Dr. Albert F. Saunders, Valdosta; "Arachnoidism—Case Report," Dr. H. M. Tolleson, Hahira.

Dr. D. P. Belcher, Pelham, has received notice from the Adjutant General's office of the War Department at Washington that he has been cited for gallantry in

action during the Meuse-Argonne offensive, France, September 28-30, 1918, while serving as First Lieutenant of the Medical Corps of the 371st Infantry, 93rd Division. In the citation it is stated in part that: "Lieutenant Belcher displayed exceptional bravery and disregard of personal danger when he administered first aid to the numerous wounded of his own and the neighboring battalions under hostile fire for over sixty hours without relief."

The Fulton County Medical Society, Atlanta, met on November 5th. Dr. Dan Y. Sage, Atlanta, gave a case report, "A Recent Pelvic Problem"; Dr. Frank K. Boland, Atlanta, gave a clinical talk, "Amebic Liver Abscess"; Dr. Joseph Yampolsky, Atlanta, read a paper, "The Southern White Clinic Child—A Study of 500 Cases, with Special Reference to Diarrhea and Otitis Media." Discussions were led by Drs. T. F. Davenport, W. L. Funkhouser, and Samuel W. Perry, all of Atlanta.

The Randolph County Medical Society met at Cuthbert on December 3rd. Dr. F. M. Martin, Shellman, and Dr. F. S. Rogers, Coleman, gave case reports. Officers were elected for 1932.

The Georgia Medical Society, Savannah, held its regular monthly meeting at its hall on November 24th. Dr. R. V. Martin, Savannah, read a paper entitled "The Conquest of Tuberculosis"; Dr. Julian K. Quattlebaum, Savannah, gave a case report, "Cancer of the Stomach Three and One-Half Years After Operation"; Dr. John W. Daniel, Jr., Savannah, discussed "Insulin Edema".

Dr. and Mrs. S. A. Boland, Jefferson, entertained the members of the Jackson County Medical Society at their home.

The American Board for Ophthalmic Examinations will hold an examination in New Orleans, May 9, 1932 at the time of the meeting of the American Medical Association. Applications may be procured from the Secretary, Dr. William H. Wilder, 122 South Michigan Avenue, Chicago.

The Fulton County Medical Society met at the Academy of Medicine, Atlanta, on December 3rd. Dr. W. S. Goldsmith, Atlanta, gave "A Historical Sketch of the Fulton County Medical Society"; Dr. Charles E. Waits, Atlanta, made a clinical talk, "Present-Day Thoughts Concerning Thyroid Disorders"; Dr. Thos. P. Goodwyn, Atlanta, read a paper entitled "Fractures of the Upper End of the Tibia Involving the Articular Surfaces". Discussions were led by Drs. Lawson Thornton, J. D. Blackburn, and Randolph Smith, all of Atlanta.

The Fulton County Medical Society will hold its regular semi-monthly meeting at the Academy of Medicine, Atlanta, on January 7th. The following committee will arrange the anniversary dinner which will be given its members: Drs. H. C. Crawford, Chairman; S. T. Brown, L. Minor Blackford, W. S.

Aiken, D. R. Longino, B. T. Beasley, Lee Bivings, F. M. Barfield, B. L. Shackleford, and Chas. W. Daniels, all of Atlanta.

Dr. E. L. Bishop, Atlanta, has been appointed a member of the Committee on Bone Sarcoma of the American College of Surgeons.

The Sixth District Medical Society met at Griffin on December 2nd. The following titles for scientific papers were on the program: "Suprapubic Lithotomy," Dr. A. H. Frye, Griffin; "Amebic Dysentery," Dr. C. Hall Farmer, Macon; "Diverticulum of the Duodenum," Dr. Thos. Harrold, Macon; "Diseases of the Thyroid Gland and Their Treatment," Dr. Chas. H. Richardson, Jr., Macon; "Atypical Appendicitis—Case Reports," Dr. George Y. Massenburg, Macon; "Demonstration of Alcoholic Injection for Trifacial Neuralgia," Dr. Charles C. Harrold, Macon; "Poison Ivy, Poison Oak, and Their Treatment," Dr. R. Cullen Goolsby, Jr., Macon. The attending members were entertained at luncheon at the Grantland Memorial Parish House. Dr. A. H. Frye, Griffin, was elected President; Dr. James B. Kay, Byron, Vice-President; Dr. H. C. Atkinson, Macon, Secretary-Treasurer.

OBITUARY

Dr. Charles Edward Dowman, Atlanta; member; Johns Hopkins University School of Medicine, Baltimore, Maryland, 1905; aged 49; died at a private sanitarium on November 14, 1931. He was the first physician in the South to limit his practice to diseases of the brain and was noted for his skill in brain surgery. His success in the most difficult of all surgical practice won for him wide renown. Patients came to him from many sections of the United States for treatment. Doctor Dowman was Assistant Professor of Pathology in the Charlottenburg Krankenhaus of Berlin, in 1905-1906; Associate Professor in the University Chirurg Klinik, Breslau, Germany, 1906-1907; Clinical Clerk in the National Hospital for Paralyzed and Epileptics at London, in 1907. After he returned to the United States, he was attending Surgeon in the Hillman Hospital, Birmingham, Ala., 1913-1915, and Associate Professor during the same period at the University of Alabama School of Medicine; Associate and Assistant Professor of Surgery at Emory University School of Medicine, 1915-1924; except for his service in the Medical Corps of the American Expeditionary Forces in France, 1917-1919. His experience in the World War added much to his surgical attainments while he served with distinction first as Captain and later as Major. Doctor Dowman was a social favorite with his acquaintances and devoted much of his skill and time to charity. He was Neurological Surgeon for the Scottish Rite Hospital for Crippled Children at Decatur; Henrietta Eggleston Hospital for Children, Atlanta; and Grady Memorial Hospital, Atlanta. He was a member of the Fulton County Medical Society, Society of Neurological Surgeons, American Neurological Association, Southern Medical Association, Southern Surgical Association, Southeastern Surgical Congress, Association for Re-

search in Nervous and Mental Diseases, Fellow of the American College of Surgeons and the American Medical Association; and a member of the Druid Hills Methodist Church. Surviving him are his widow, one son, Charles E. Dowman, Jr. Funeral services were conducted from Spring Hill Chapel by Dr. Wallace Rogers, Pastor of the Glenn Memorial Methodist church; and Dr. Louie D. Newton, Pastor of the Druid Hills Baptist church. Members of the Fulton County Medical Society, staff of the Piedmont Hospital, faculty of Emory University School of Medicine, and members of the Atlanta Music Club formed an honorary escort to Oxford followed by interment in the family burial lot.

Dr. Robert E. Stone, Atlanta; Emory University School of Medicine, Emory University, 1891; aged 63; died at his home, 414 Park Avenue, on October 18, 1931. He practiced medicine for thirty-five years and had an excellent reputation for the treatment of stomach diseases. Doctor Stone was a willing worker in civic and religious affairs and held in high esteem by many friends. Surviving him are his widow, one son, Troy E. Stone, Atlanta; three daughters, Miss Eloise Stone, Miss Esther Stone, and Miss Mildred Stone, all of Atlanta. Funeral services were conducted from the residence by Rev. C. C. Keathly, Pastor of St. Luke's Methodist church, of which Doctor Stone was a member and chairman of the Board of Stewards. Interment was in West View cemetery.

Dr. William B. Vaughn, White; member; Southern Medical College, Atlanta, 1891; aged 76; died at his home of pneumonia on November 10, 1931. He was held in high esteem by the people of Bartow and surrounding counties. Doctor Vaughn was one of the leading physicians of his home community for many years. Surviving him are his widow, two daughters, Mrs. E. C. Goode and Mrs. L. G. Hughes. Interment was in the village cemetery at Pine Log.

UNITED STATES CIVIL SERVICE EXAMINATIONS

The United States Civil Service Commission announces the following-named open competitive examinations:

Chief Nurse (Indian Service).

Head Nurse (Indian Service).

Graduate Nurse (Various Services).

Graduate Nurse, Visiting Duty (Various Services).

Applications for the positions of chief nurse and head nurse (Indian Service), and for graduate nurse, and graduate nurse, visiting duty (various services) must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than December 30, 1931, except that the Commission reserves the right to issue subsequent notice closing the receipt of applications before that date.

The examinations are to fill vacancies throughout the United States.

Full information may be obtained from the Secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city or from the United States Civil Service Commission, Washington, D. C.

OFFICERS AND COMMITTEES OF THE ASSOCIATION

1931-1932

NEXT ANNUAL SESSION, SAVANNAH, MAY 17, 18, 19, 20, 1932

OFFICERS

President—Arthur G. Fort, Atlanta.
 President-Elect—Marvin M. Head, Zebulon.
 First Vice-President—Marion C. Pruitt, Atlanta.
 Second Vice-President—H. M. Tolleson, Hahira.
 Secretary-Treasurer—Allen H. Bunce, Atlanta.
 Parliamentarian—M. A. Clark, Macon.

DELEGATES TO THE A. M. A.

Wm. H. Myers, Savannah (1931-2).
 Alternate, Wm. A. Mulherin, Augusta.
 C. W. Roberts, Atlanta (1931-2).
 Alternate, B. T. Wise, Americus.
 O. H. Weaver, Macon (1932-3).
 Alternate, C. K. Sharp, Arlington.

COUNCIL

C. L. Ayers, Toccoa, Chairman.
 M. M. McCord, Rome, Clerk.

COUNCILORS

1. Wm. H. Myers, Savannah (1933).
2. J. A. Redfearn, Albany (1933).
3. J. C. Patterson, Cuthbert (1933).
4. O. W. Roberts, Carrollton (1933).
5. W. A. Selman, Atlanta (1934).
6. K. S. Hunt, Griffin (1934).
7. M. M. McCord, Rome (1934).
8. H. M. Fullilove, Athens (1934).
9. C. L. Ayers, Toccoa (1932).
10. S. J. Lewis, Augusta (1932).
11. A. S. M. Coleman, Douglas (1932).
12. J. Cox Wall, Eastman (1932).

VICE-COUNCILORS

1. C. Thompson, Millen (1933).
2. R. F. Wheat, Bainbridge (1933).
3. Chas. A. Greer, Oglethorpe (1933).
4. W. H. Clark, LaGrange (1933).
5. Marion C. Pruitt, Atlanta (1934).
6. A. H. Frye, Griffin (1934).
7. W. H. Perkinson, Marietta (1934).
8. M. A. Hubert, Athens (1934).
9. J. K. Burns, Jr., Gainesville (1932).
10. H. D. Allen, Jr., Milledgeville (1932).
11. K. McCullough, Waycross (1932).
12. J. W. Edmondson, Dublin (1932).

COMMITTEES

SCIENTIFIC WORK

Jas. E. Paullin, Atlanta, Chairman.
 J. C. Patterson, Cuthbert.
 Allen H. Bunce, Secretary-Treasurer, Atlanta.

PUBLIC POLICY AND LEGISLATION

Dan Y. Sage, Atlanta, Chairman (1934).
 J. W. Palmer, Ailey (1932).
 A. R. Rozar, Macon (1933).
 Allen H. Bunce, Secretary-Treasurer, Atlanta.
 T. F. Abercrombie, Atlanta, Commissioner of Health,
 State of Georgia.

MEDICAL DEFENSE

M. A. Clark, Macon, Chairman (1933).
 Wm. A. Mulherin, Augusta (1934).
 C. L. Ayers, Toccoa, Chairman of Council.
 Allen H. Bunce, Atlanta, Secretary-Treasurer.

HOSPITALS

Grady N. Coker, Canton, Chairman (1932).
 C. H. Richardson, Jr., Macon (1933).
 K. McCullough, Waycross (1934).
 George F. Klugh, Atlanta (1935).
 Arthur D. Little, Thomasville (1936).

ABNER WELLBORN CALHOUN
LECTURESHIP

James E. Paullin, Atlanta, Chairman (1933).
 H. I. Reynolds, Athens (1934).
 Eugene E. Murphey, Augusta (1935).
 Craig Barrow, Savannah (1936).
 Frank K. Boland, Atlanta (1932).

NECROLOGY

A. J. Mooney, Statesboro, Chairman.
 J. M. Smith, Valdosta.
 J. T. McCall, Rome.

HISTORY

Frank K. Boland, Atlanta.
 M. A. Clark, Macon.
 Arthur G. Fort, President, Atlanta.
 Marvin M. Head, President-Elect, Zebulon.
 A. H. Bunce, Secretary-Treasurer, Atlanta.

CRAWFORD W. LONG MEMORIAL PRIZE

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 V. P. Sydenstricker, Augusta.
 George Bachmann, Atlanta.
 R. V. Lamar, Augusta.

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 Chas. H. Watt, Thomasville.
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 G. T. Bernard, Augusta.
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 W. E. McCurry, Hartwell.
 Ralston Lattimore, Savannah.
 Paul L. Holliday, Athens.

FRATERNAL DELEGATES TO OTHER
STATE MEETINGS

To visit Alabama: John M. Poer, West Point;
 C. W. Strickler, Atlanta.
 To visit Florida: J. R. Jordan, Ellaville; I. W.
 Irvin, Albany.
 To visit North Carolina: J. K. Burns, Gaines-
 ville; Frank Eskridge, Atlanta.
 To visit South Carolina: Hal M. Davison, Atlanta;
 H. J. Rosenberg, Atlanta.
 To visit Tennessee: A. R. Rozar, Macon; Geo. B.
 Smith, Rome.

Directory of the Medical Association of Georgia for 1931

Names of all members and officers are published as corrected by Secretaries of county societies.

BALDWIN COUNTY

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Allen, E. W., Milledgeville
Allen, H. D., Jr., Milledgeville
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Bostwick, W. A., Milledgeville
Cornwell, Gibson K., Milledgeville
Cox, C. G., Milledgeville
Echols, Geo. L., Milledgeville
Evans, R. E., Milledgeville
Garrard, J. I., Milledgeville
Lamar, R. V., Milledgeville
Longino, L. P., Milledgeville
Scott, W. M., Milledgeville
Swint, R. C., Milledgeville
Walker, N. P., Milledgeville
Wheeler, G. A., Milledgeville, (Hon.)
Wiley, John D., Milledgeville
Wood, O. C., Milledgeville
Yarbrough, Y. H., Milledgeville

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Ellis, Chas. L., Kingston
Griffin, W. C., Cartersville
Horton, A. L., Cartersville
Howell, S. M., Cartersville
Lowry, T., Cartersville
McGowan, H. S., Cartersville
Murdock, J. L., Emerson (Hon.)
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Vaughn, Wm. B., White (Hon.)
(Deceased)

Wilson, R. E., Cartersville
Wofford, W. E., Cartersville

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Ware, D. B., Fitzgerald
Ware, R. M., Fitzgerald
Wilcox, C. H., Fitzgerald
Willis, G. W., Ocilla

BIBB COUNTY

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Bldg., Macon
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Infirmary, Macon
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rium, Macon
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Chrisman, W. W., 700 Spring St., Macon
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Farmer, C. Hall, The Clinic, Macon
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Macon

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Macon

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Bldg., Macon

Harrold, Chas. C., 700 Spring St.,
Macon

Harrold, Thomas, 700 Spring St., Macon

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Hinton, Chas. C., 700 Spring St., Macon

Holmes, J. P., 700 Spring St., Macon

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Kay, J. B., Byron

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Macon

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King, J. L., Grand Bldg., Macon

Martin, J. W., Bibb Bldg., Macon

Massenburg, G. Y., The Clinic, Macon

McAfee, J. C., Georgia Casualty Bldg.,
Macon

McAfee, L. C., Bibb Bldg., Macon

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Bldg., Macon

Meriwether, W. W., Georgia Casualty
Bldg., Macon

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Bldg., Macon

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Moses, Harry, Georgia Casualty Bldg.,
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Newton, R. G., Georgia Casualty Bldg.,
Macon

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Macon

Respass, H., Grand Bldg., Macon

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Macon

Richardson, R. W., Elk Place & Tulane
Ave., New Orleans, La.

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 Ross, J. T., Citizens & Southern Bank Bldg., Macon
 Rozar, A. R., Oglethorpe Infirmary, Macon
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 Thompson, O. R., 700 Spring St., Macon
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 Weaver, H. G., 700 Spring St., Macon
 Weaver, O. H., 700 Spring St., Macon
 Webb, F. L., Bibb Bldg., Macon
 Williams, W. A., Georgia Casualty Bldg., Macon
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 Kennedy, W. D., Metter
 Mooney, A. J., Statesboro
 McElveen, J. M., Brooklet
 Olliff, H. H., Register
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 Stapleton, C. E., Groveland
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 Byne, J. M., Sr., Waynesboro
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 Fulcher, M. O., Waynesboro
 Hillis, W. W., Sardis
 Lewis, J. B., Waynesboro
 Lowe, Wm. R., Midville
 Macauley, H. A., Waynesboro
 (Deceased)
 McCarver, W. C., Vidette
 Miller, Robt. L., Waynesboro
 Smith, B. H., Keysville

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 Sec'y.-Treas.....Green, A. J.
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 Sec'y.-Treas.....Goodwyn, H. J.

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 Griffith, J. C., Burwell, (Hon.)
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 Powell, B. C., Villa Rica
 Powell, Jno. E., Villa Rica
 Reese, D. S., Carrollton
 Roberts, O. W., Carrollton
 Scales, S. F., Carrollton, R. 1

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(Georgia Medical Society)

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 Delegate.....Lang, G. H.
 Alternate Delegate.....Usher, Charles
 Alternate Delegate.....Charlton, T. J.

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 Baker, J. O., 126 East Oglethorpe Ave., Savannah
 Barrow, Craig, Chippewa Square, Savannah.
 Bassett, V. H., City Hall, Savannah
 Blake, H. H., 408 Abercorn St., Savannah
 Blitch, J. R., Ellabell (Hon.)
 Bray, S. E., DeRenne Apts., Savannah
 Broderick, J. R., 114 E. Jones St., Savannah
 Carter, J. N., 107 East Jones St., Savannah
 Charlton, T. J., 220 East Oglethorpe Ave., Savannah
 Chisholm, Julian F., 512 Abercorn St., Savannah
 Clay, T. S., 120 E. Jones St., Savannah
 Cole, W. A., 20 East Taylor St., Savannah
 Compton, H. T., 14 East Taylor St., Savannah
 Corson, E. R., 11 West Jones St., Savannah
 Crawford, W. B., 14 East Taylor St., Savannah
 Dancy, William R., 102 Jones St., West, Savannah
 Daniel, John W., Jr., 102 E. Henry St., Savannah
 Daniel, J. W., 102 E. Henry St., Savannah
 DeCaradeuc, St., 'J. R., DeRenne Apartments, Savannah
 DeLoach, L. A., 121 Jones St., West, Savannah
 Demmond, E. C., DeRenne Apartments, Savannah
 Drane, Robert, DeRenne Apartments, Savannah
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 Edwards, D. B., 604 Drayton St., Savannah
 Egan, M. J., Jr., 110 East Liberty St., Savannah
 Egloff, G. E., 324 E. Liberty St., Savannah
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 Epting, M. J., 7 West Gordon St., Savannah
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 Blackman, W. W., 2140 Peachtree Road, N.W., Atlanta
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 Selman, W. A., 157 Forrest Ave., N.E., Atlanta
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 Strickler, C. W., 123 Forrest Ave., N.E., Atlanta
 Swanson, Cosby, 478 Peachtree St., N.E., Atlanta
 Teasley, Gerald, Grady Hospital, Atlanta (Asso.)
 Teasley, Harry, Wesley Memorial Hospital, Atlanta (Asso.)

Thomas, Elsie B., 82 Atlanta Ave., S.E., Atlanta
 Thomson, J. D., 158 Forrest Ave., N.E., Atlanta
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 lumbus
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 Columbus
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 Columbus
 McDuffie, J. H., Sr., Masonic Temple,
 Columbus
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 lumbus
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 Schley, Francis B., Swift Bldg., Colum-
 bus
 Willis, J. N., Swift Bldg., Columbus
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 lumbus
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 lumbus
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 Alternate Delegate McCurdy, E. C.

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 Gary, Loren, Georgetown

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 Ingram, H. R., Coleman
 Martin, F. M., Shellman
 Moore, G. Y., Cuthbert
 McCurdy, E. C., Shellman
 Patterson, F. D., Jr., Auburn, Ala.
 (Hon.)
 Patterson, F. D., Cuthbert (Hon.)
 (Deceased)
 Patterson, J. C., Cuthbert
 Rogers, F. S., Coleman
 Saurez, Annette McD., Cuthbert (Hon.)
 Shepard, J. L., Carnegie
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 Weathers, A. F., Shellman
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 Bedingfield, W. R., Southern Finance Bldg., Augusta
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 Blanchard, P. G., Appling
 Brittingham, John W., Southern Finance Bldg., Augusta
 Brown, T. P., Marion Bldg., Augusta
 Bryans, C. I., Lamar Bldg., Augusta
 Bryson, R. L., Southern Finance Bldg., Augusta
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 Burpee, C. M., University Hospital, Augusta
 Butler, J. H., Southern Finance Bldg., Augusta
 Chaney, Ralph H., Medical College, Augusta
 Clayton, Malcolm D., 811 Metcalf St., Augusta
 Crane, C. W., 1345 Greene St., Augusta
 Davidson, A. A., 1116 Greene St., Augusta
 Eve, H. J., 619 Greene St., Augusta
 Gibson, C., Thomson
 Goodrich, W. H., Southern Finance Bldg., Augusta
 Gray, J. D., 1345 Greene St., Augusta
 Harison, S. R., Southern Finance Bldg., Augusta
 Harison, Wm. H., 122 Jackson St., Augusta (Deceased)
 Harrell, H. P., Southern Finance Bldg., Augusta
 Harris, R. L., U. S. Veterans' Hospital, Augusta
 Hensley, E. A., 1812 Watkins St., Augusta
 Holmes, L. P., Southern Finance Bldg., Augusta
 Horne, G. T., Southern Finance Bldg., Augusta

Houston, W. R., Margaret Wright Hospital, Augusta
 Huson, W. Joseph, Masonic Temple, Augusta
 Jennings, W. D., 753 Broad St., Augusta
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 Kelly, G. Lombard, Medical College, Augusta
 Kershaw, Theo., Southern Finance Bldg., Augusta
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 Kilpatrick, Chas. M., 1345 Greene St., Augusta
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 Lee, F. Lansing, Southern Finance Bldg., Augusta
 Lentz, C. S., University Hospital, Augusta
 Levy, M. S., Southern Finance Bldg., Augusta
 Lewis, S. J., Southern Finance Bldg., Augusta
 Lichtenstein, Samuel, Medical College, Augusta
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 Mealing, H. G., Martintown Road, R. F. D., Augusta
 Michel, H. M., Southern Finance Bldg., Augusta
 Milligan, K. W., 942 Greene St., Augusta
 Mosteller, Ralph, Medical College, Augusta
 Mountain, G. W., 2612 Walton Way, Augusta
 Mulherin, F. X., Southern Finance Bldg., Augusta
 Mulherin, W. A., Southern Finance Bldg., Augusta
 Murphey, E. E., 432 Telfair St., Augusta
 Oden, Jno. W., Gracewood
 Oertel, T. E., Southern Finance Bldg., Augusta
 Page, Hugh N., Southern Finance Bldg., Augusta
 Philpot, W. K., Lamar Bldg., Augusta
 Phinizz, Irvine, Southern Finance Bldg., Augusta
 Ponton, T. R., University Hospital, Augusta
 Price, W. T., Montgomery Bldg., Augusta
 Pund, Edgar R., Medical College, Augusta
 Rhodes, R. L., Southern Finance Bldg., Augusta
 Roberts, W. H., 828 Greene St., Augusta
 Robertson, J. Righton, 753 Broad St., Augusta
 Roule, J. Victor, Medical College, Augusta
 Scharnitzky, E. O., Southern Finance Bldg., Augusta
 Schwartz, E. W., Medical College, Augusta
 Shaw, H. W., Southern Finance Bldg., Augusta
 Sherman, Jno. H., 1122 Johns Road, Augusta
 Silver, D. M., Southern Finance Bldg., Augusta
 Sydenstricker, V. P., University Hospital, Augusta

Tessier, L. P., Masonic Temple, Augusta
 Thurmond, J. W., 407 Seventh St., Augusta
 Timmons, C. C., Marion Bldg., Augusta
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 Traylor, Geo. A., Southern Finance Bldg., Augusta
 Ward, Chas. D., Southern Finance Bldg., Augusta
 Weeks, J. L., Harlem
 Weeks, R. B., Southern Finance Bldg., Augusta
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SCREVEN COUNTY

Officers

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 Sec'y.-Treas..... Lanier, L. F.

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 Alternate Delegate..... Hunt, K. S.

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 Delegate..... Chaffin, E. F.
 Alternate Delegate..... Isbell, J. E. D.

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 Kenyon, J. M., Richland
 Lunsford, J. F., Preston
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 McCurdy, W. F., Richland (Hon.)
 (Deceased)
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 McMath, J. F., Americus (Hon.)
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 Primrose, A. C., Americus
 Smith, Herschel A., Americus
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 Wise, B. J., Plains
 Wise, B. T., Plains
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 Wood, Kenneth, Leslie

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 (Deceased)
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Vice-President.....Bryan, S. H.
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 Mann, Frank R., McRae
 McMillan, Thos. J., Milan
 Neal, J. W., Scotland (Hon.)
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 Sec'y.-Treas.....Thomas, Logan L.

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 Cranford, J. R., Sasser
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 Delegate.....Watt, C. H.

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 Andrews, Agnew Thomasville
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 Bell, Rudolph, Thomasville
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 (Hon.)
 Cheshire, S. L., Thomasville
 Collins, J. J., Thomasville
 Erickson, Mary J., Thomasville
 Ferguson, C. H., Thomasville
 Garrett, J. A., Meigs
 Glover, G. B., Monticello, Fla., (Hon.)
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 Isler, J. N., Meigs
 Jarrell, W. W., Thomasville
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 Jones, H., Coolidge (Hon.)
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 Little, A. D., Thomasville
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 Moore, H. M., Thomasville
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 Sanchez, S. E., Barwick

Vann, H. A., Boston (Hon.)
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 Camp, J. A., Ohoopce
 Currie, M. L., Alston (Hon.)
 Hall, J. K., Lyons
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 Youmans, H. D., Lyons

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(Calhoun, Early, Miller)

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 Holland, S. P., Blakely
 Roberts, C. A., Leary
 Sharp, C. K., Arlington
 Sharp, C. M., Stony Wold Sanitarium,
 Lake Kushaqua, N. Y.
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 Simmons, B. K., Blakely
 Standifer, J. G., Blakely
 Standifer, W. B., Blakely (Hon.)
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TRI SOCIETY

(Liberty, Long, McIntosh)

Member

Armistead, I. G., Warsaw

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 Alternate Delegate.....Lane, Joe E.

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 Hadaway, W. H., LaGrange
 Hammett, H. H., LaGrange
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 Morgan, D. E., LaGrange
 McCall, W. R., LaGrange
 McCulloh, Hugh, Jr., West Point
 McCulloh, Hugh, West Point
 O'Neal, Rance, West Point
 O'Neal, R. S., LaGrange
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 Phillips, W. P., LaGrange
 Poer, J. M., West Point
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 Vineyard, T. L., LaGrange
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 Belflower, H. M., Sycamore
 Rawlins, R. D., Rebecca
 Rogers, F. W., Ashburn
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 Turner, W. J., Ashburn

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 Carter, R. L., Thomaston
 Garner, J. E., Thomaston
 Harris, C. A., The Rock
 McKenzie, J. M., Thomaston
 Williams, K. S., Thomaston
 Wilson, Samuel, Yatesville
 Woodall, F. M., Thomaston

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 Vice-President.....Kitchen, S. B.
 Sec'y.-Treas.....Hammond, J. H.
 Delegate.....Shields, H. F.

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 Hammond, J. H., LaFayette
 Hice, E. H., Rock Springs
 Kitchen, S. B., LaFayette
 Middleton, D. S., Rising Fawn
 Murphy, M. W., Ringgold
 Shields, H. F., Chickamauga
 Shields, J. A., LaFayette

Simonton, Fred H., LaFayette
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 Vice-President.....Day, J. B. H.
 Sec'y.-Treas.....McClintic, J. K.

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 Day, J. B. H., Social Circle
 Floyd, Chas. S., Loganville
 Lott, W. H., Monroe
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 Nunnally, H. B., Monroe
 Pirkle, J. A., Monroe
 Spearman, W. D., Social Circle
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 Vice-President.....Atwood, Geo. E.
 Secretary-Treasurer.....McCullough, K.
 Delegate.....Penland, J. E.

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 Bagley, J. B., Waycross
 Bradley, D. M., Waycross
 Bussell, B. R., Waycross
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 Carswell, H. J., Waycross
 DeLoach, A. W., Waycross
 Dorminy, A. C., Hoboken
 Fleming, A., Folkston
 Folks, W. M., Waycross
 Hafford, W. C., Waycross
 Hawkins, L. M., Blackshear
 Hendry, G. T., Blackshear
 Huey, H. G., Homerville
 Johnson, R. L., Waycross
 Latimer, J. H., Waycross
 McCullough, K., Waycross
 Milton, P. H., Jr., Waycross
 Minchew, B. H., Waycross
 Mixson, W. D., Waycross
 Penland, J. E., Waycross
 Pomeroy, W. L., Waycross
 Reavis, W. F., Waycross
 Seaman, H. A., Waycross
 Sessions, J. H., Homerville (Deceased)
 Stephens, C. M., Waycross
 Walker, R. C., Waycross
 Williams, A. D., Folkston
 Williams, W. P., Blackshear
 Wilson, J. R., Thomson
 Witmer, C. A., Waycross

WARREN COUNTY**Officers**

President.....Cason, H. B., Jr.
 Vice-President.....Kennedy, H. T.
 Secretary-Treasurer.....Davis, A. W.
 Delegate.....Ware, F. L.

Members

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 Davis, A. W., Warrenton
 Kennedy, H. T., Warrenton
 Ricketson, F. B., Warrenton (Hon.)
 Ware, F. L., Warrenton

WASHINGTON COUNTY**Officers**

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 Vice-President.....Helton, B. L.
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 Delegate.....Peacock, E. S.
 Alternate Delegate.....Burdett, J. R.

Members

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 Cason, W. M., Sandersville
 Dillard, J. B., Davisboro
 Helton, B. L., Sandersville
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 Lennard, O. D., Sandersville
 Lozier, N. H., Sandersville
 Malone, Steve B., Sandersville
 McMaster, D. E., Tennille
 Mitchell, L. C., Sandersville
 Newsom, N. J., Sandersville
 Overby, N., Sandersville
 Peacock, E. S., Harrison
 Rawlings, F. B., Sandersville
 Rogers, O. L., Sandersville
 Taylor, Ralph L., Davisboro
 Vickers, T. E., Wrightsville, R. F. D.

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 Vice-President.....Ogden, I. K.
 Sec'y.-Treas.....Gordon, A. J.

Members

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 Gordon, A. J., Jesup
 Moody, E. A., Odum
 Ogden, D. H., Odum (Hon.)
 Ogden, I. K., Odum
 Ritch, T. G., Jesup
 Tyre, J. L., Screven

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President.....Rollins, J. C.
 Vice-President.....Easley, Frank
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 Delegate.....Kennedy, B. L.
 Alternate Delegate.....Broadrick, G. L.

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 Bradley, R. S., Dalton (Hon.)
 Broadrick, G. L., Dalton
 Easley, Frank, Dalton
 Erwin, H. L., Dalton
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 Lacewell, J. F., Dalton (Hon.)
 McAfee, J. G., Dalton
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 Shellhorse, E. O., Dalton
 Starr, Trammell, Dalton
 Steed, J. H., Dalton

WILCOX COUNTY**Officers**

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Members

Dorsey, Homer A., Pitts
 Gammage, James T., Pineview
 McAllister, J. M. C., Rochelle
 Mitchell, Stephen R., Pineview (Hon.)

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 Wills, C. E., Washington
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WORTH COUNTY

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UNITED STATES CIVIL SERVICE
EXAMINATIONS

The United States Civil Service Commission announces the following-named open competitive examinations:

Senior Medical Officer

Tuberculosis.
 Neurology-Psychiatry (either one, or the two combined).
 Roentgenology.
 Bacteriology-Pathology (either one, or the two combined).
 Eye, ear, nose and throat (any one, or in any combination).
 Orthopedic surgery.
 Internal medicine and diagnosis.
 General surgery.
 Urology.
 Cardiology.

Medical Officer and Associate Medical Officer

Cardiology.
 Child hygiene.
 Eye, ear, nose and throat.
 Genito-urinary (urology).
 Internal medicine and diagnosis.
 Neuropsychiatry.
 Pathology and bacteriology.
 Roentgenology.
 Surgery (general or orthopedic).
 Tuberculosis.
 Venereal disease.

Applications for the positions of senior medical officer, medical officer, and associate medical officer must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than December 30, 1931, except that the Commission reserves the right to issue subsequent notice closing the receipt of applications before that date.

The examinations are to fill vacancies in the Veterans' Administration, Public Health Service, Indian Service, Coast and Geodetic Survey, and Panama Canal Zone.

The entrance salary for senior medical officer is \$4,600 a year, for medical officer is \$3,800 a year, and for associate medical officer is \$3,200 a year.

Competitors will not be required to report for examination at any place, but will be rated on their education, training, and experience.

Certain specified education and experience required.

Full information may be obtained from the Secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city or from the United States Civil Service Commission, Washington, D. C.

The American Medical Association will hold its eighty-third annual session at New Orleans, May 9, 10, 11, 12, 13, 1932.

Physical examinations at periodic intervals afford protection against disease.

ABSTRACT

Functionally Two-Chambered Heart

(Abstract of article by L. Minor Blackford, M. D., and Lewis D. Hoppe, M.D., Atlanta, Ga., from the *American Journal of Diseases of Children*, May, 1931, Vol. 41, pp. 1111-1122.)

The functionally two-chambered heart is of interest on account of both its rarity and the unexpected duration of life in an occasional case. Textbooks often dismiss the subject with few words as one incompatible with life. Abbott,¹ however, cited two cases (Peacock and Young) of "cor biloculare" in which death occurred at the end of the fourth decade with only terminal symptoms, and two (Mann and Holmes) in which the subjects attained 21 and 24 years, respectively. Lineback² described the heart of a new-born infant in which incompletely separated atriums opened through a bicuspid valve into a single ventricle; torsion was incomplete. "Fischer³ in 1912, reported the case of a man, aged 21, who died of renal abscess following angina. At necropsy the heart was found to be quite similar to the present (Lineback's) case, having only one ventricle discharging blood into an aorta and a pulmonary artery." Wood and Williams⁴ recorded a case in a colored girl who had been able to work for a living until seized with meningococcic meningitis at 15. The interatrial septum was represented by a slight ridge, and the atrioventricular valve had five cusps. The common ventricle opened through a normal valve into the dilated aorta, and through a stenosed, bicuspid valve into the pulmonary trunk. More recently, Steinwinder and McPeak⁵ reported a more remarkable case. A Mexican laborer was able to support himself, except for two brief periods of cardiac decompensation associated with acute infection of the respiratory tract, until grave heart failure occurred at the age of 21. Under the care of the authors, compensation was restored, and he remained "fairly" comfortable until two years later, when he succumbed to an infection of the respiratory tract. The electrocardiogram exhibited "a complex that could be likened to that obtaining were there a block in both branches of the bundle." The foramen ovale was patent, there was no interventricular septum, and the aorta and pulmonary trunk were transposed. The pulmonary orifice was narrowed. Such cases, as Abbott said, "present perhaps the best illustrations we have that the admixture of venous and arterial blood is compatible with long life and with only slight disturbance of the circulation."

The case of an infant, aged 6½ months, is reported, with clinical, laboratory and postmortem observations. The right atrium opened through the foramen primum into the left atrium, which in turn opened through the mitral valve into a large ventricle. The tricuspid valve was absent. The aortic valve was normal; the pulmonic, bicuspid. Extreme stenosis of the ventriculobulbar junction prevented the passage of an adequate amount of blood to the lungs. A theory is advanced to explain the pathogenesis.

GEORGIA

Memorial to Doctor Eve Dedicated—At a dedication ceremony in Augusta, November 14th, a monument was unveiled by Tytus Filipowicz, Polish ambassador to the United States, in memory of Dr. Paul Fitzsimmons Eve to mark the one hundredth anniversary of his services to Poland. Two bronze tablets to be placed on the monument were given by the Polish-American Medical and Dental Association and the University of Georgia Medical Department. Presentation of the tablets was made by Drs. Walter Peters, Cleveland, chairman of the Eve Committee of the Association, and William L. Moss, dean of the Medical Department. Dr. Duncan Eve, Nashville, a grandson of Dr. Paul F. Eve, gave an address in behalf of the Eve family. The city council of Augusta recently adopted a resolution which provided for naming the 600 block of Greene Street "Eve Square" in honor of Doctor Eve. It is in this square that many members of the family lived during the past century. Doctor Eve was born near Augusta in 1806; he received his medical degree from the University of Pennsylvania School of Medicine in 1828. At the time of the Polish insurrection in November, 1830, Doctor Eve was studying in Paris. He organized a Polish-American committee in France to aid the Poles in their struggle for freedom and, in 1831, joined the insurgent army's medical service. He received Poland's highest military decoration and remained with the army until the end of the revolution. Doctor Eve was professor of surgery in Georgia Medical College from 1932 to 1850, when he went to the University of Louisville. Later he was professor of surgery at the University of Nashville and at the Missouri Medical College. In 1857 he was President of the American Medical Association. He died in 1877.

—Journal A. M. A., Nov. 21, 1931.

A MODERN INTERN'S HISTORY

From Year Book, 1928, Winnipege General Hospital

Miss Digitalina Ayrt, Age 21.

Adm. Dec. 23, 1927.

E. C.

1. Loss of Appetite after meals
2. Ingrown toe-nails
3. Barber's itch
4. Summer complaint

History of present illness

Patient was well until two weeks ago when she fell off a chesterfield, sustaining injuries resulting in her present disability.

Previous Illnesses

1. Snake bite in 1914
2. Sunburn right knee 1916
3. Acute alcoholism 1918
4. Smoker's itch 1920
5. Cirrhosis of liver 1922

Income about 2 a. m.

Outcome doubtful.

Put on digitalis mxv o.h 1 with loss of 40 lbs. in 48 hours.

Two-hour Functional Test

		S.G.
6:00 A.M.	40 cc	1007
8:30 A.M.	6 cc	1006
9:00 A.M.	624 cc	1005
9:15 A.M.	6 drops	1004
12:00 M.	18 cc	1003
2:00 P.M.	10 m	1002
5:00 P.M.	4 drams	1001
7:00 P.M.	1 quart	940
Total day	4 gal.	7940
Total night		

Urea Concentration Test

1	400 cc	2.6%
2	60 cc	.8%

3 Sheets wrung out 15 cc

Obtained culture

Jamaican Bedbug

Urinalysis S. G. 1492 Albumen—almost present
Sugar—Lactose present

Physical Exam

Pt. is healthy looking female, apparently of more than stated age. She is lying comfortably in bed pushing a bell.

Head and Neck

Eyes—No eye-brows; pupils re-act to light and darkness. Slight cross-eye left.

Teeth—Not yet sent in.

Tongue—Forked.

Chest—Present. Snorts, wheezes, honks and rhonci heard amidships. A few crackles on grunting. Percussion—dull all over.

Heart—Many thrills, no murmurs.

Pulse right arm 86

Pulse left arm 44

Average pulse 52

Abdomen—Barrel-shaped. No foetal sound heard. Fourteen scars present; probably appendectomy.

Diagnosis—Halitosis of unknown origin.

—Journal American Medical Association.

July 14, 1928.

RELATIONSHIP OF DISORDERS OF DIGESTIVE TRACT TO ANEMIA

William B. Castle, Clark W. Heath, Maurice B. Strauss, and Wilmot C. Townsend, Boston (*Jour. A. M. A.*, Sept. 26, 1931), present a complete chain of evidence for the substantiation of the hypothesis that pernicious anemia is a deficiency disease resulting not from a direct inadequacy of the diet, but from a conditioned deficiency produced by the failure of some function of the normal stomach to take place in the stomach of the patient with pernicious anemia. This reaction, in normal individuals has to do with the manipulation of protein and leads to the absorption of a factor necessary for the maintenance of normal bone marrow activity. In general, disturbances of the gastro-intestinal tract of various kinds may interfere with absorption or with processes necessary for the proper metabolism of food substances essential for the normal functioning of bone marrow.

